

Pantheon Report

Generated at 2018-02-13 11:05:44 (UTC).

Data path: GCE Iowa Ethernet (*local*) → GCE London Ethernet (*remote*).

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

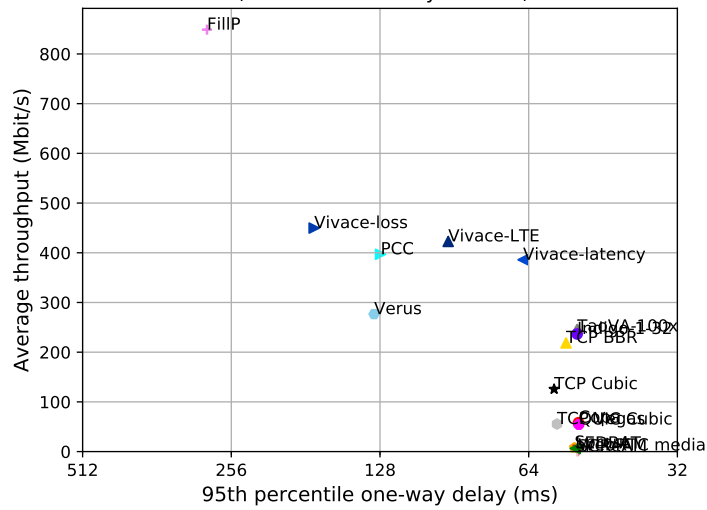
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

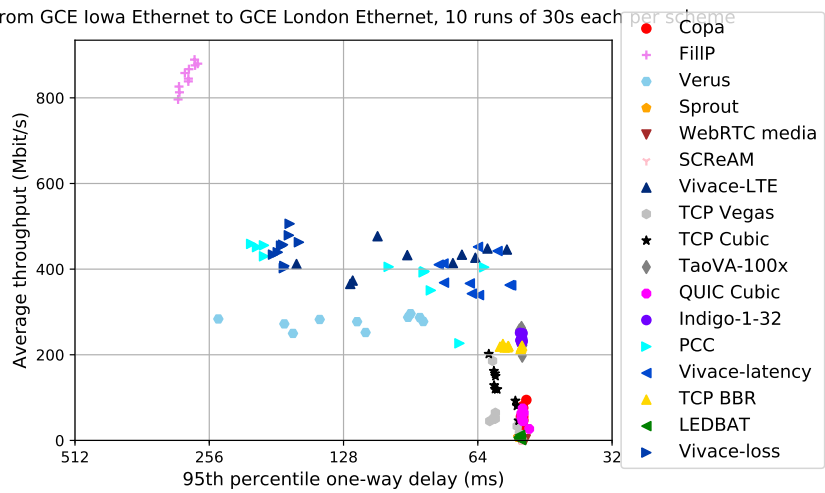
Git summary:

```
branch: master @ 2efdad57c2c56a9458b0d01ff33345e11732665
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Iowa Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE London Ethernet, 10 runs of 30s each



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	218.66	53.78	0.07
TCP Cubic	10	125.67	56.85	0.29
LEDBAT	10	6.28	51.52	0.88
PCC	10	396.99	127.63	0.79
QUIC Cubic	9	54.50	50.65	0.00
SCReAM	10	0.22	51.00	0.00
WebRTC media	10	2.28	50.82	0.00
Sprout	10	7.83	51.70	0.52
TaoVA-100x	10	241.60	51.04	0.00
TCP Vegas	10	55.41	56.09	0.94
Verus	10	276.53	131.59	0.97
Copa	10	58.15	50.73	0.01
FillP	10	848.88	286.70	8.19
Indigo-1-32	10	236.62	51.06	0.16
Vivace-latency	10	385.96	65.72	0.06
Vivace-loss	10	449.66	173.97	4.18
Vivace-LTE	10	422.88	93.14	0.08

Run 1: Statistics of TCP BBR

Start at: 2018-02-13 05:37:14

End at: 2018-02-13 05:37:44

Below is generated by plot.py at 2018-02-13 09:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.21 Mbit/s

95th percentile per-packet one-way delay: 50.913 ms

Loss rate: 0.00%

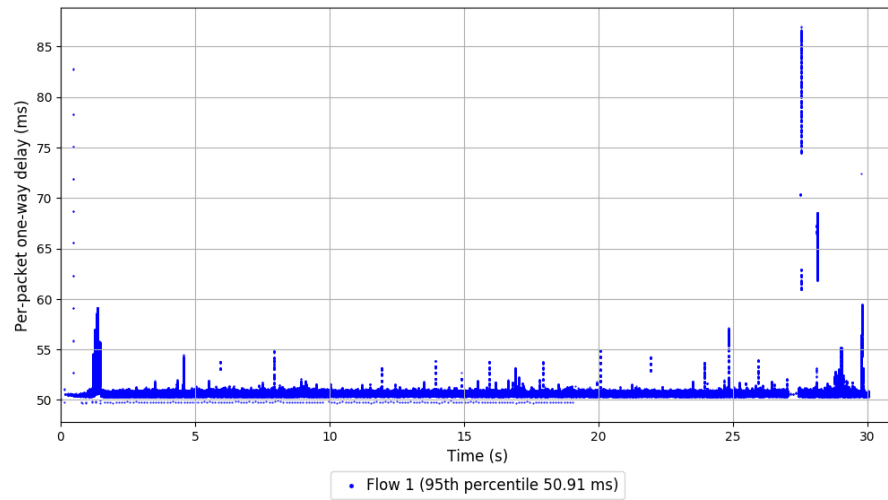
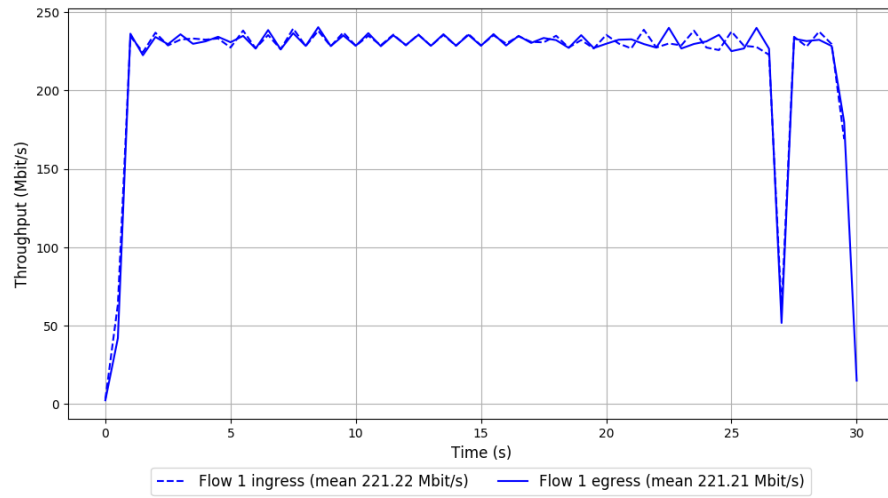
-- Flow 1:

Average throughput: 221.21 Mbit/s

95th percentile per-packet one-way delay: 50.913 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-13 05:52:00

End at: 2018-02-13 05:52:30

Below is generated by plot.py at 2018-02-13 09:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.94 Mbit/s

95th percentile per-packet one-way delay: 55.693 ms

Loss rate: 0.09%

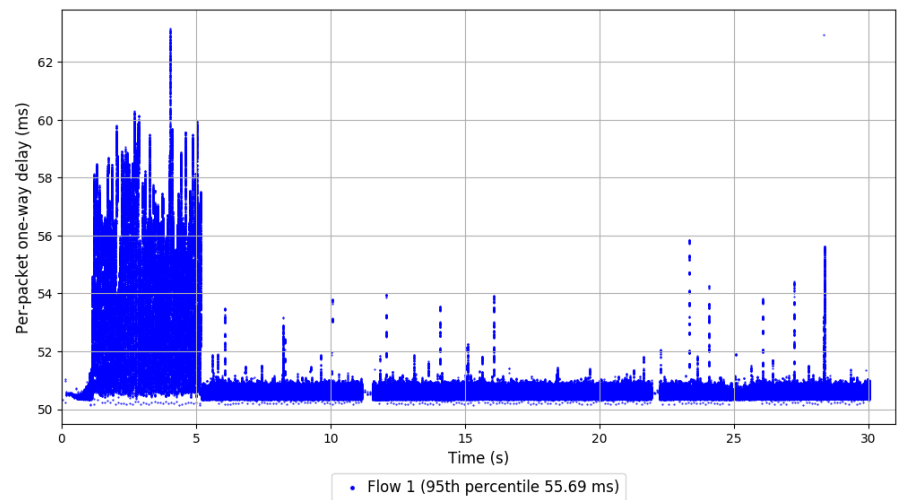
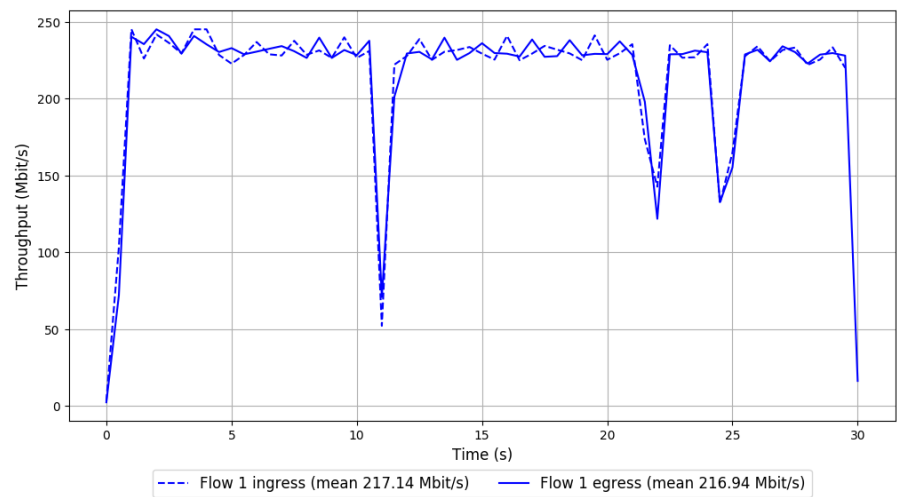
-- Flow 1:

Average throughput: 216.94 Mbit/s

95th percentile per-packet one-way delay: 55.693 ms

Loss rate: 0.09%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-13 06:06:51

End at: 2018-02-13 06:07:21

Below is generated by plot.py at 2018-02-13 09:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.80 Mbit/s

95th percentile per-packet one-way delay: 51.207 ms

Loss rate: 0.01%

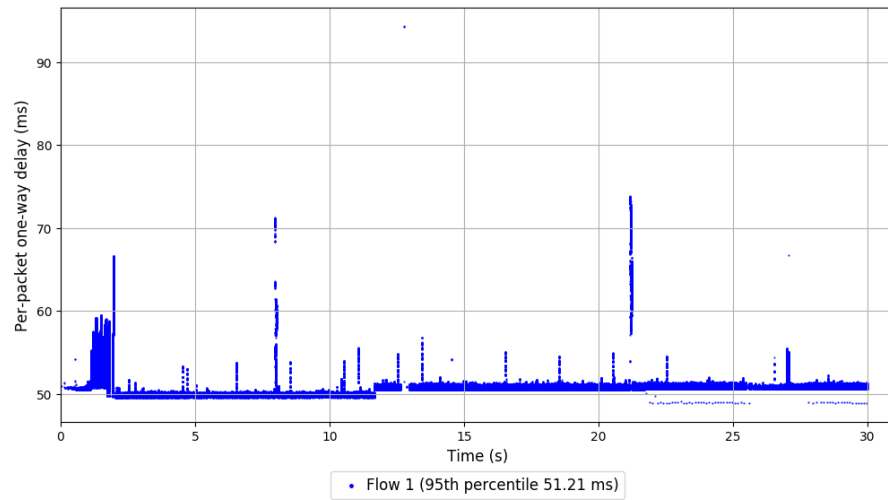
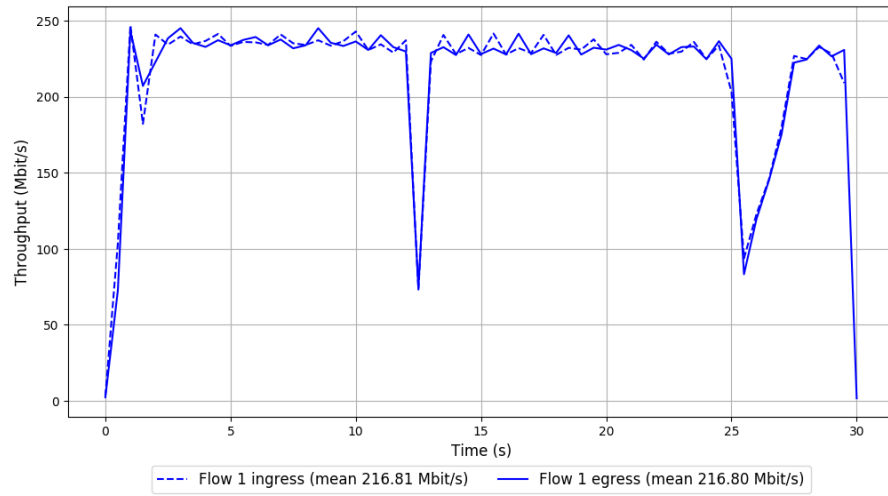
-- Flow 1:

Average throughput: 216.80 Mbit/s

95th percentile per-packet one-way delay: 51.207 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-13 06:21:31

End at: 2018-02-13 06:22:01

Below is generated by plot.py at 2018-02-13 09:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.67 Mbit/s

95th percentile per-packet one-way delay: 51.324 ms

Loss rate: 0.21%

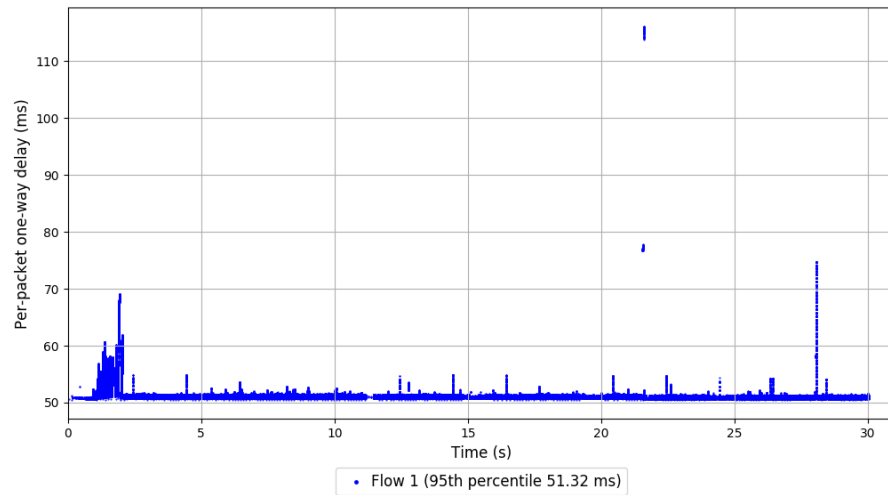
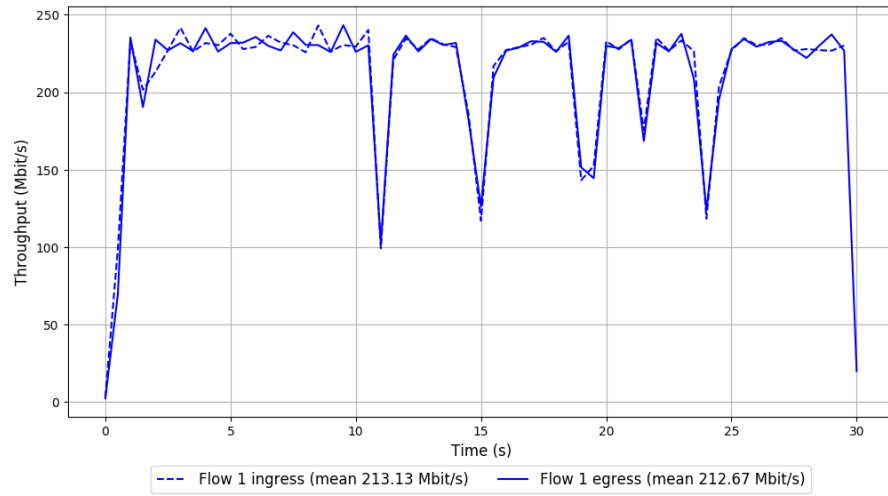
-- Flow 1:

Average throughput: 212.67 Mbit/s

95th percentile per-packet one-way delay: 51.324 ms

Loss rate: 0.21%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-13 06:36:01

End at: 2018-02-13 06:36:31

Below is generated by plot.py at 2018-02-13 09:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.43 Mbit/s

95th percentile per-packet one-way delay: 54.704 ms

Loss rate: 0.21%

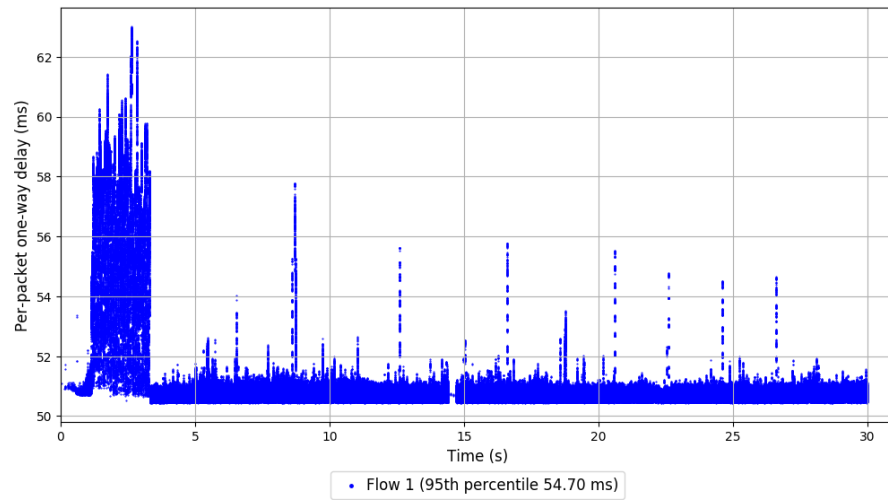
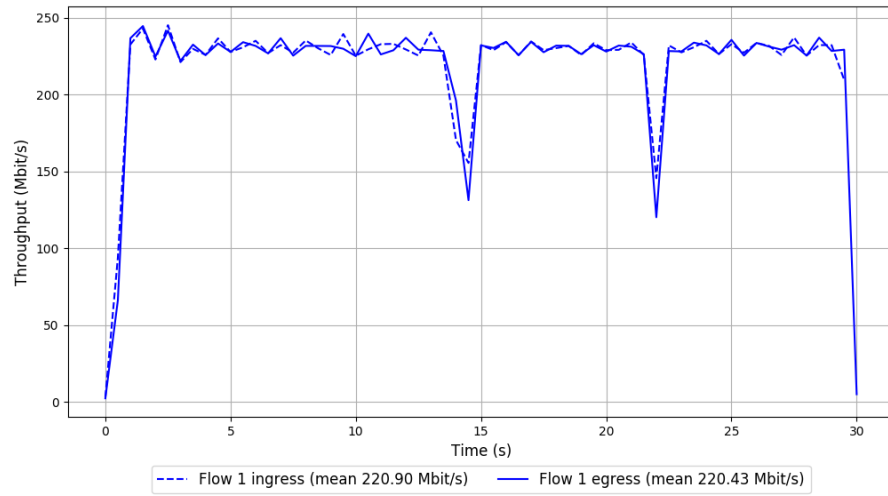
-- Flow 1:

Average throughput: 220.43 Mbit/s

95th percentile per-packet one-way delay: 54.704 ms

Loss rate: 0.21%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-13 06:50:29

End at: 2018-02-13 06:50:59

Below is generated by plot.py at 2018-02-13 09:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.91 Mbit/s

95th percentile per-packet one-way delay: 57.071 ms

Loss rate: 0.00%

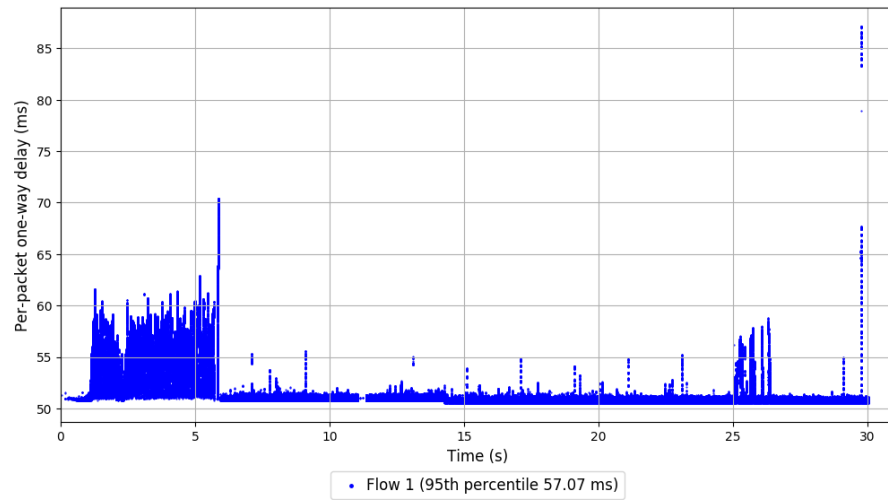
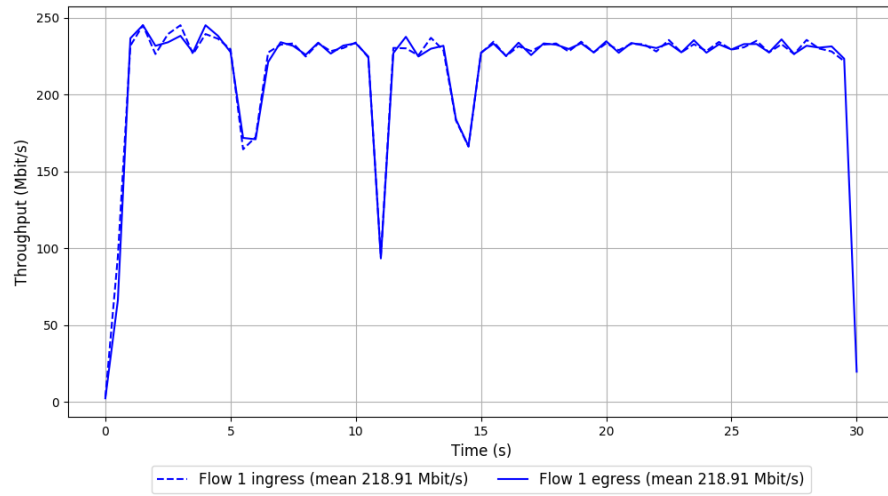
-- Flow 1:

Average throughput: 218.91 Mbit/s

95th percentile per-packet one-way delay: 57.071 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-13 07:04:58

End at: 2018-02-13 07:05:28

Below is generated by plot.py at 2018-02-13 09:48:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.21 Mbit/s

95th percentile per-packet one-way delay: 56.225 ms

Loss rate: 0.00%

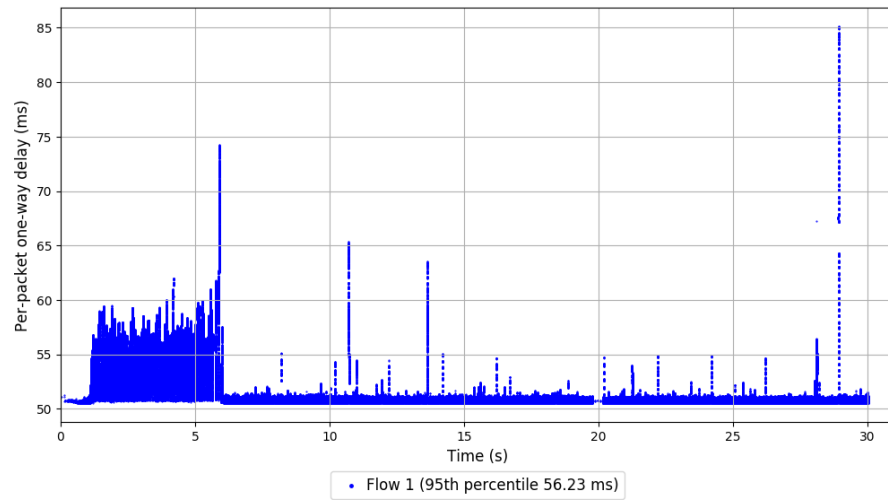
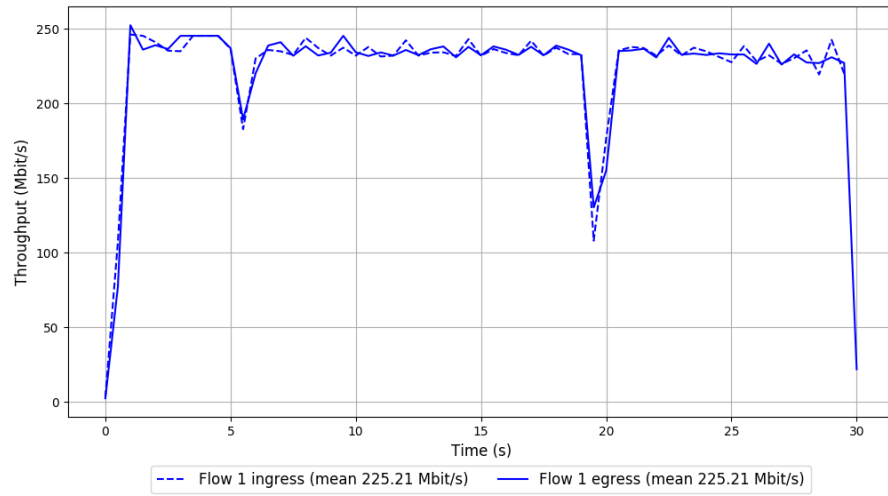
-- Flow 1:

Average throughput: 225.21 Mbit/s

95th percentile per-packet one-way delay: 56.225 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-13 07:19:22

End at: 2018-02-13 07:19:52

Below is generated by plot.py at 2018-02-13 09:48:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.29 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.19%

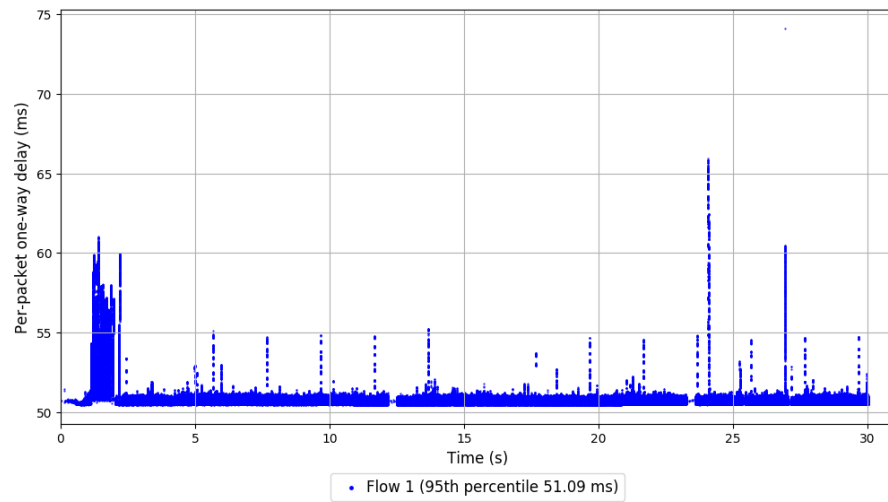
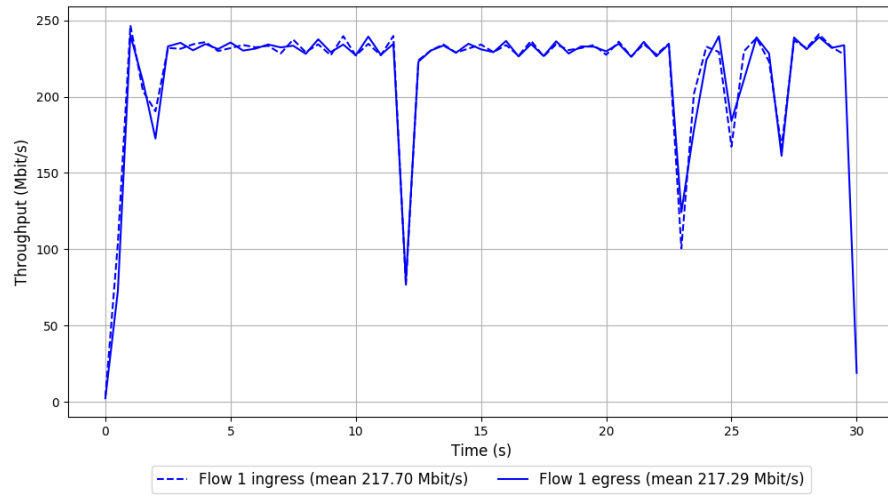
-- Flow 1:

Average throughput: 217.29 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.19%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-13 07:33:51

End at: 2018-02-13 07:34:21

Below is generated by plot.py at 2018-02-13 09:51:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.74 Mbit/s

95th percentile per-packet one-way delay: 54.643 ms

Loss rate: 0.00%

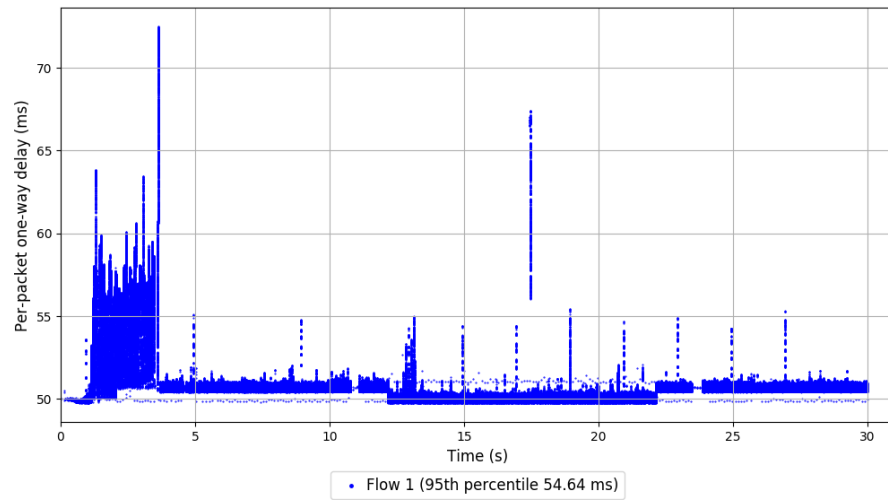
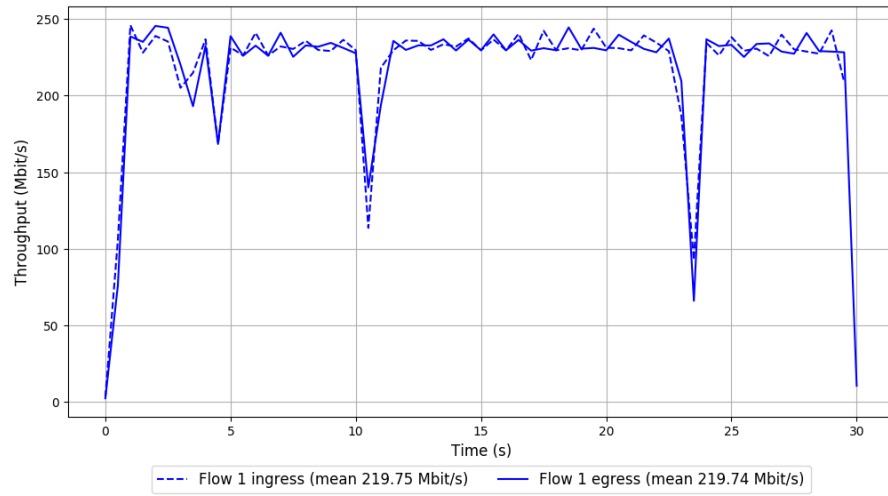
-- Flow 1:

Average throughput: 219.74 Mbit/s

95th percentile per-packet one-way delay: 54.643 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-13 07:48:26

End at: 2018-02-13 07:48:56

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.42 Mbit/s

95th percentile per-packet one-way delay: 54.891 ms

Loss rate: 0.00%

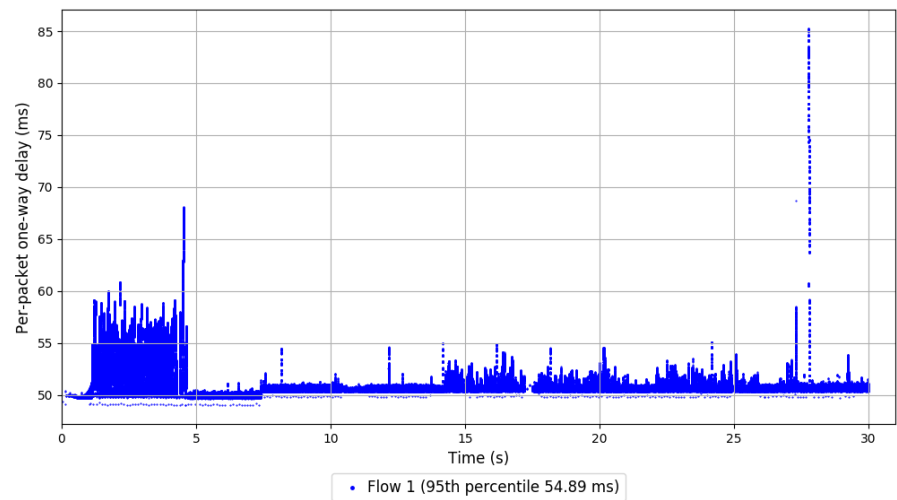
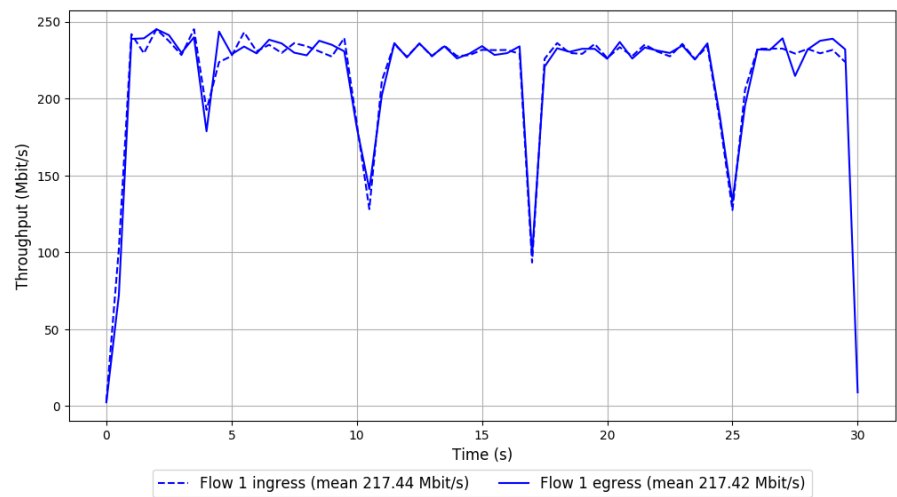
-- Flow 1:

Average throughput: 217.42 Mbit/s

95th percentile per-packet one-way delay: 54.891 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-13 05:44:27

End at: 2018-02-13 05:44:57

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.15 Mbit/s

95th percentile per-packet one-way delay: 58.407 ms

Loss rate: 0.28%

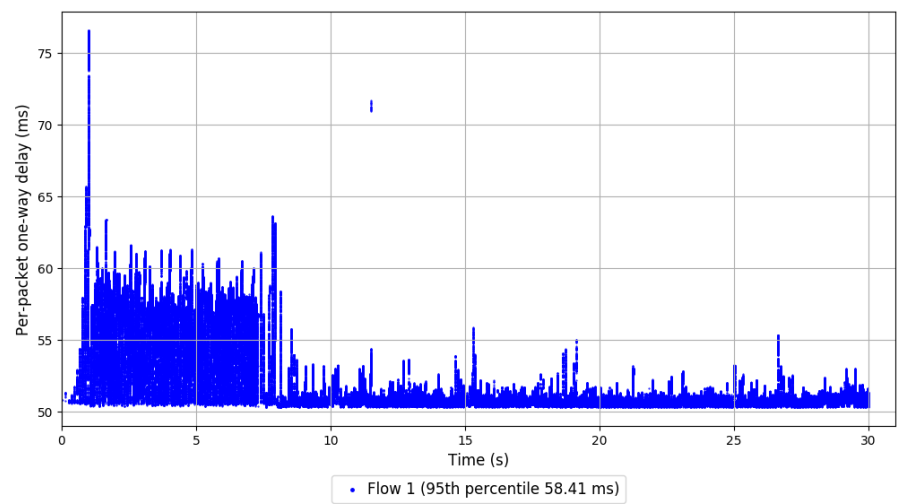
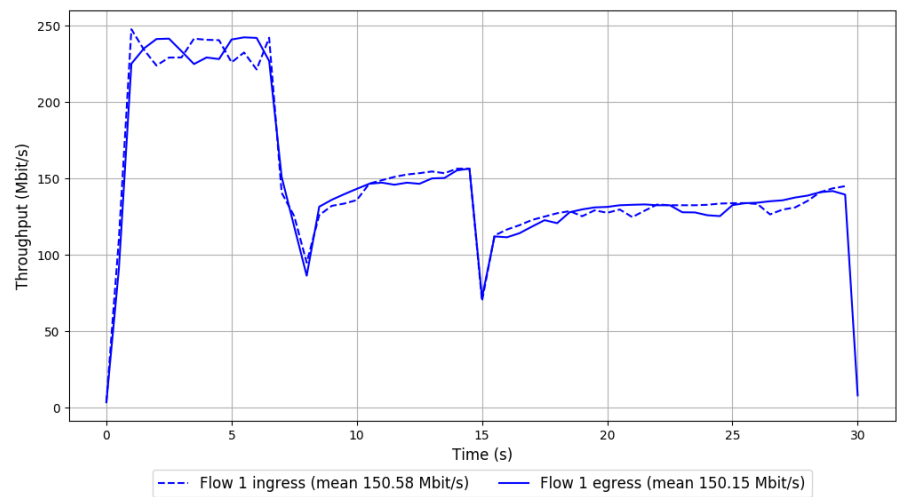
-- Flow 1:

Average throughput: 150.15 Mbit/s

95th percentile per-packet one-way delay: 58.407 ms

Loss rate: 0.28%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-13 05:59:30

End at: 2018-02-13 06:00:00

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.53 Mbit/s

95th percentile per-packet one-way delay: 58.836 ms

Loss rate: 0.66%

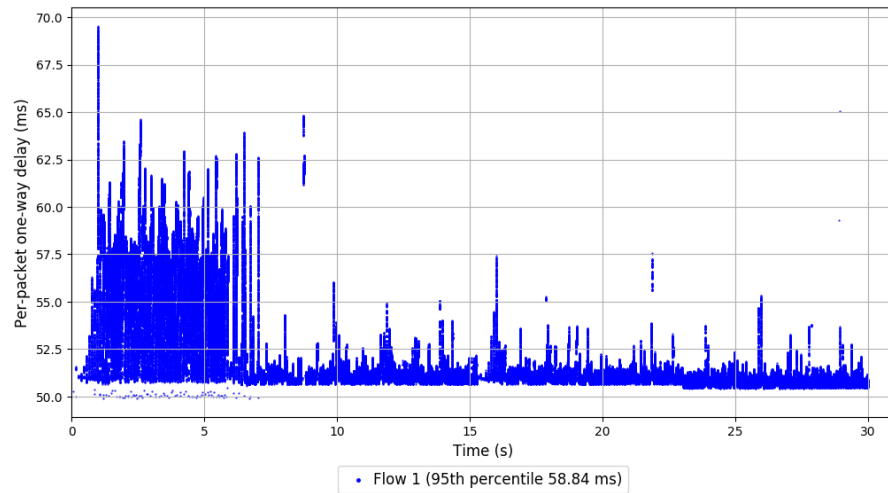
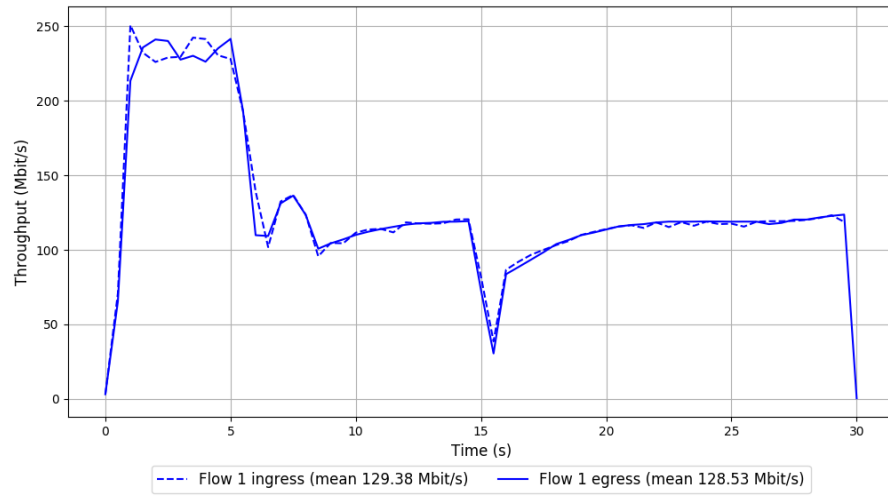
-- Flow 1:

Average throughput: 128.53 Mbit/s

95th percentile per-packet one-way delay: 58.836 ms

Loss rate: 0.66%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-13 06:14:07

End at: 2018-02-13 06:14:37

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.93 Mbit/s

95th percentile per-packet one-way delay: 58.558 ms

Loss rate: 0.25%

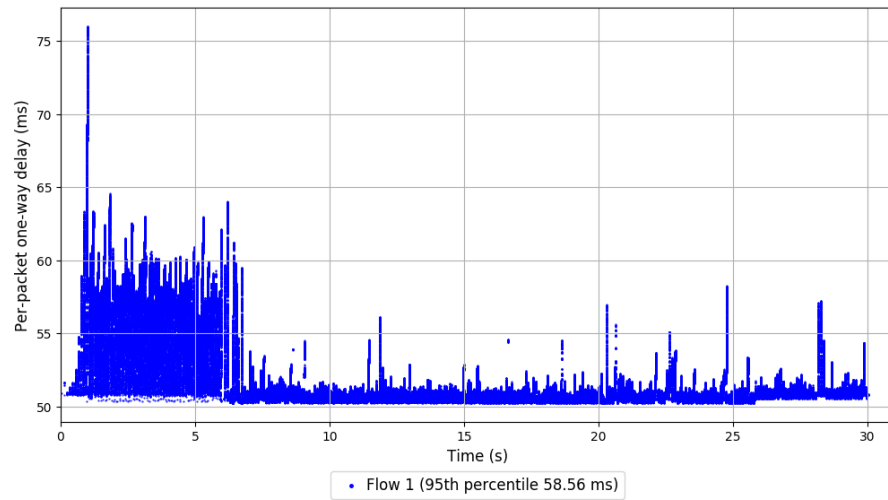
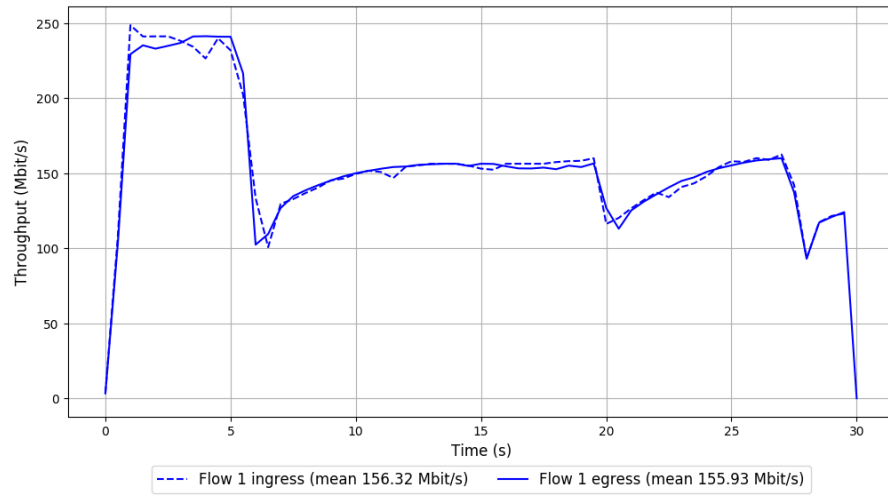
-- Flow 1:

Average throughput: 155.93 Mbit/s

95th percentile per-packet one-way delay: 58.558 ms

Loss rate: 0.25%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-13 06:28:43

End at: 2018-02-13 06:29:13

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.53 Mbit/s

95th percentile per-packet one-way delay: 52.711 ms

Loss rate: 0.07%

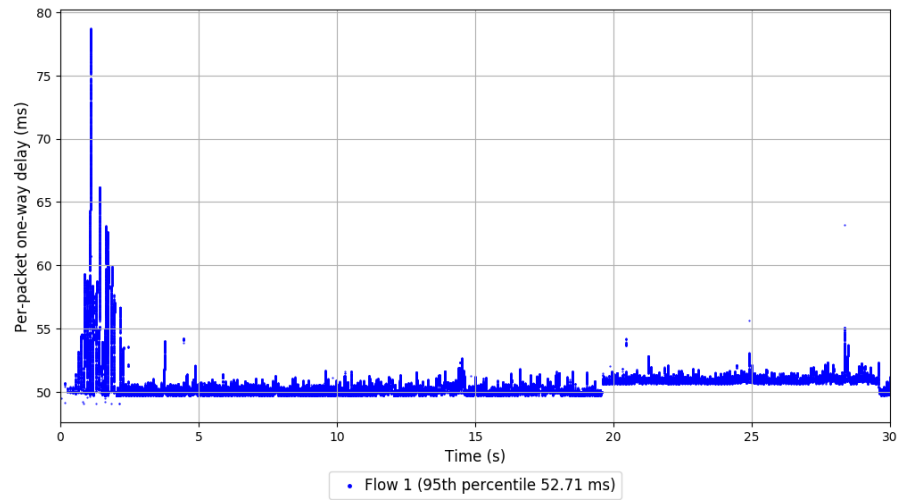
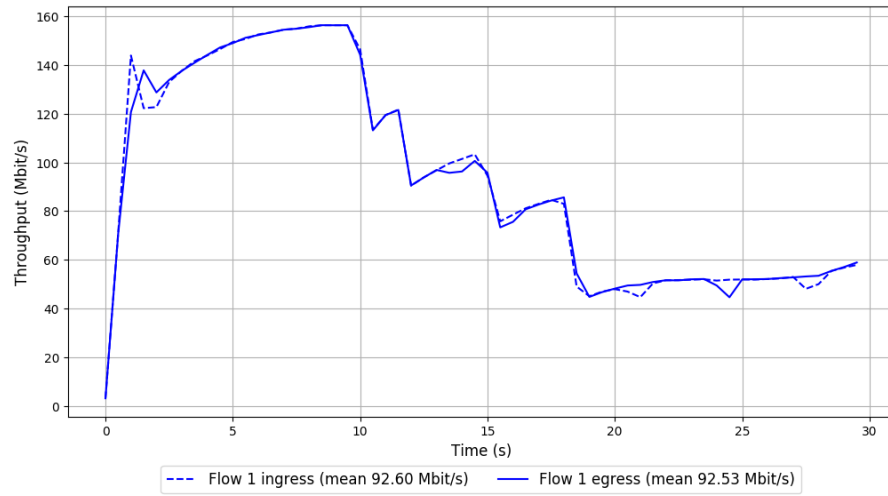
-- Flow 1:

Average throughput: 92.53 Mbit/s

95th percentile per-packet one-way delay: 52.711 ms

Loss rate: 0.07%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-13 06:43:10

End at: 2018-02-13 06:43:40

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.12 Mbit/s

95th percentile per-packet one-way delay: 57.888 ms

Loss rate: 0.01%

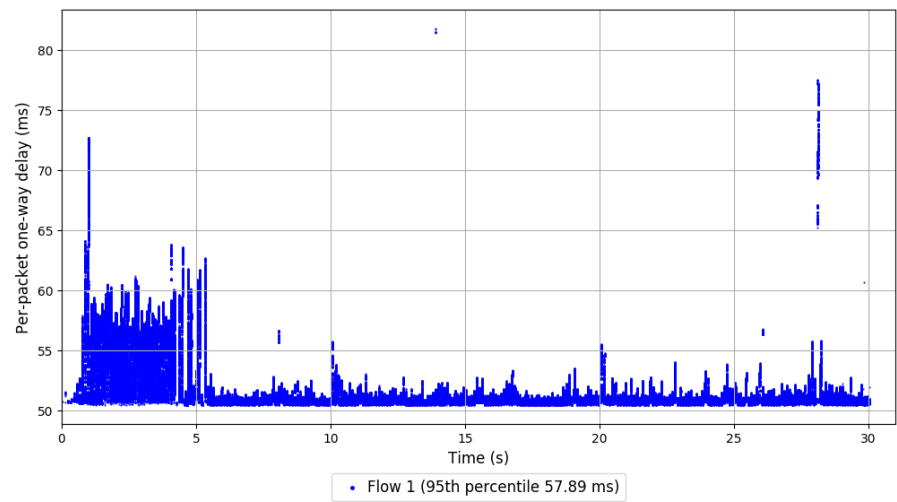
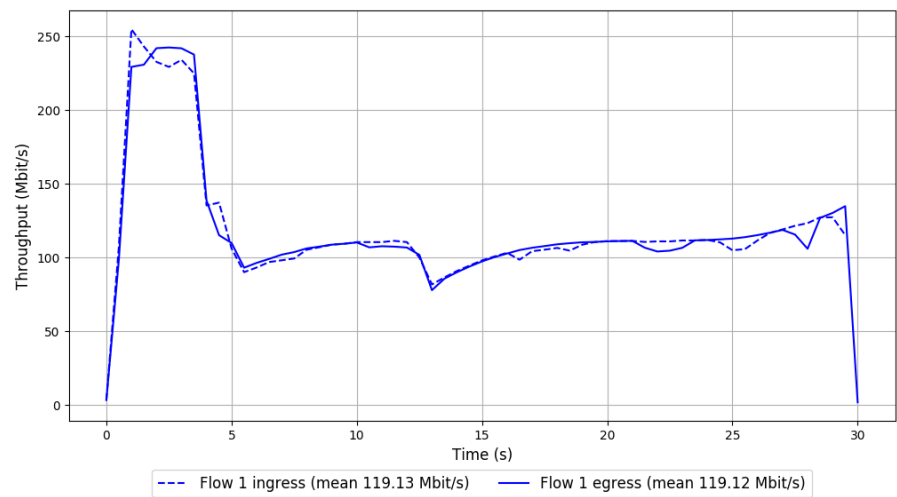
-- Flow 1:

Average throughput: 119.12 Mbit/s

95th percentile per-packet one-way delay: 57.888 ms

Loss rate: 0.01%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-13 06:57:40

End at: 2018-02-13 06:58:10

Below is generated by plot.py at 2018-02-13 09:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.97 Mbit/s

95th percentile per-packet one-way delay: 58.895 ms

Loss rate: 0.08%

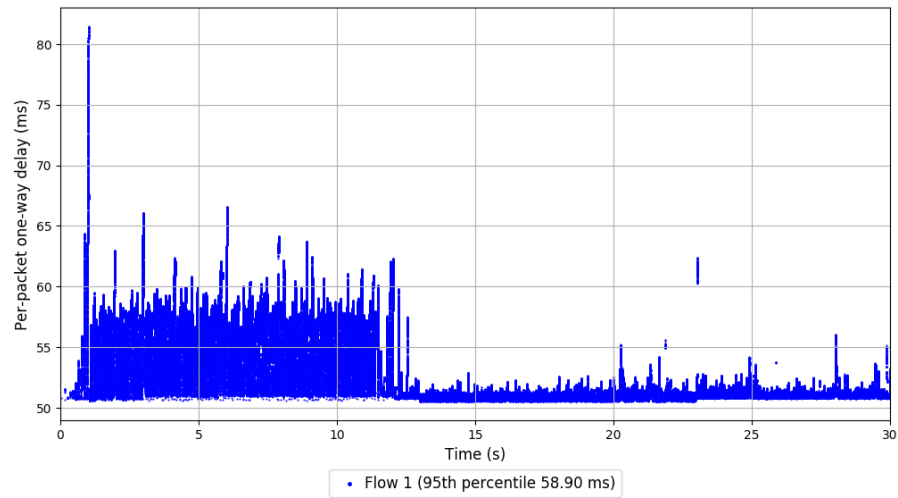
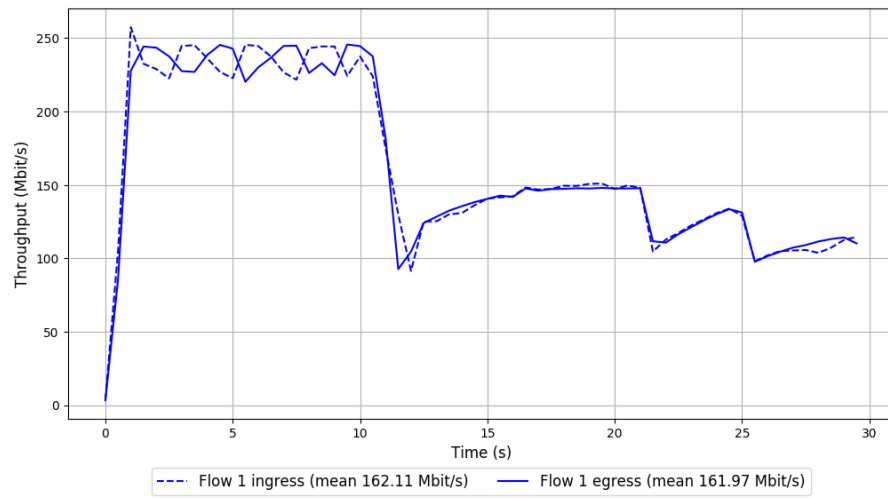
-- Flow 1:

Average throughput: 161.97 Mbit/s

95th percentile per-packet one-way delay: 58.895 ms

Loss rate: 0.08%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-13 07:12:09

End at: 2018-02-13 07:12:39

Below is generated by plot.py at 2018-02-13 09:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.98 Mbit/s

95th percentile per-packet one-way delay: 58.564 ms

Loss rate: 0.28%

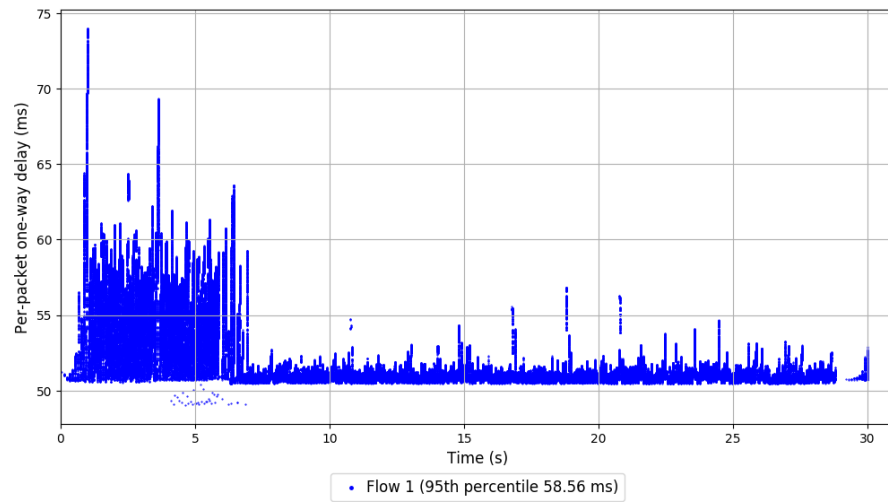
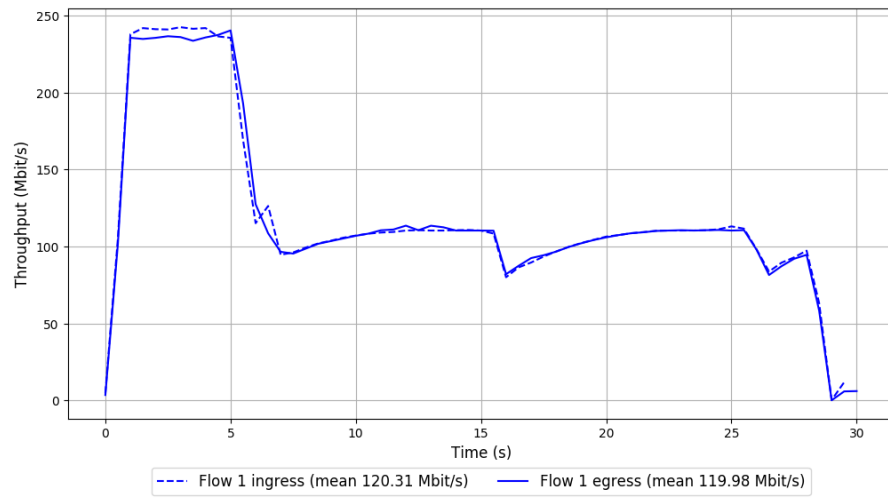
-- Flow 1:

Average throughput: 119.98 Mbit/s

95th percentile per-packet one-way delay: 58.564 ms

Loss rate: 0.28%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-13 07:26:32

End at: 2018-02-13 07:27:02

Below is generated by plot.py at 2018-02-13 09:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.15 Mbit/s

95th percentile per-packet one-way delay: 51.846 ms

Loss rate: 0.73%

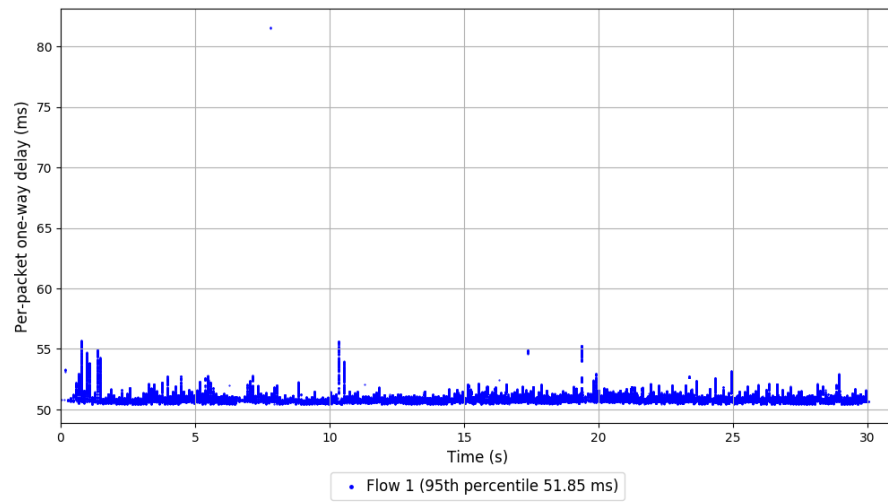
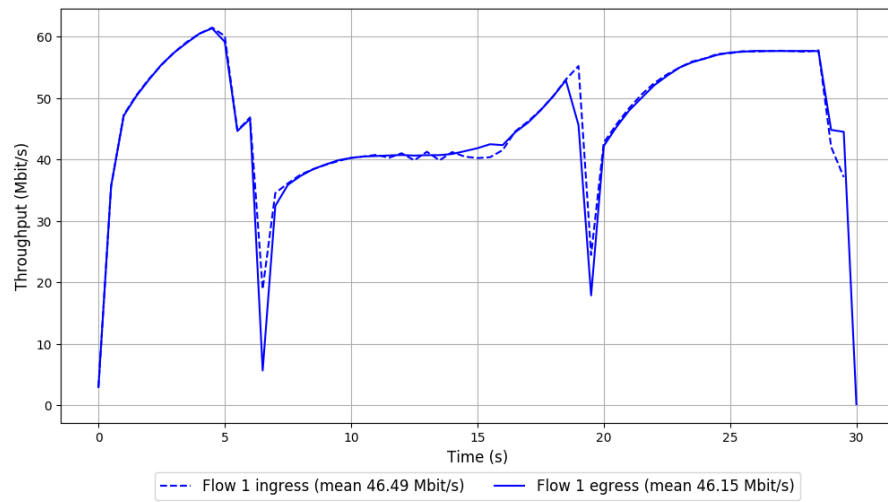
-- Flow 1:

Average throughput: 46.15 Mbit/s

95th percentile per-packet one-way delay: 51.846 ms

Loss rate: 0.73%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-13 07:41:01

End at: 2018-02-13 07:41:31

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.81 Mbit/s

95th percentile per-packet one-way delay: 60.477 ms

Loss rate: 0.00%

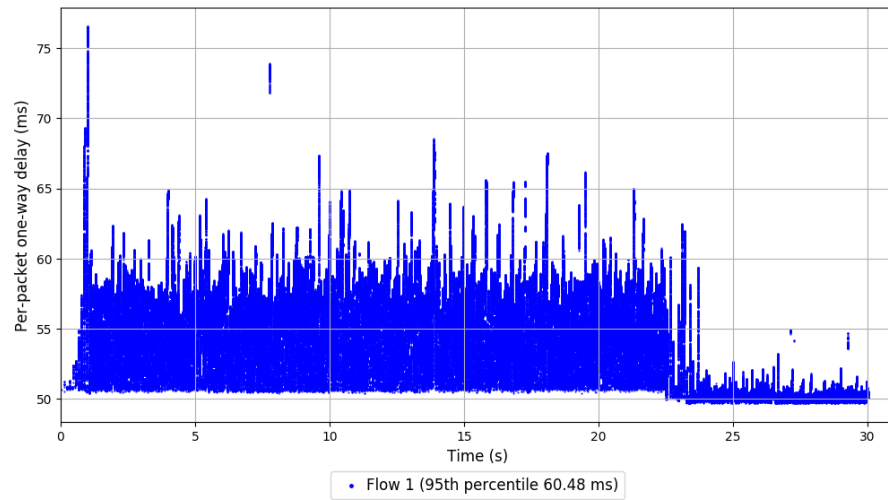
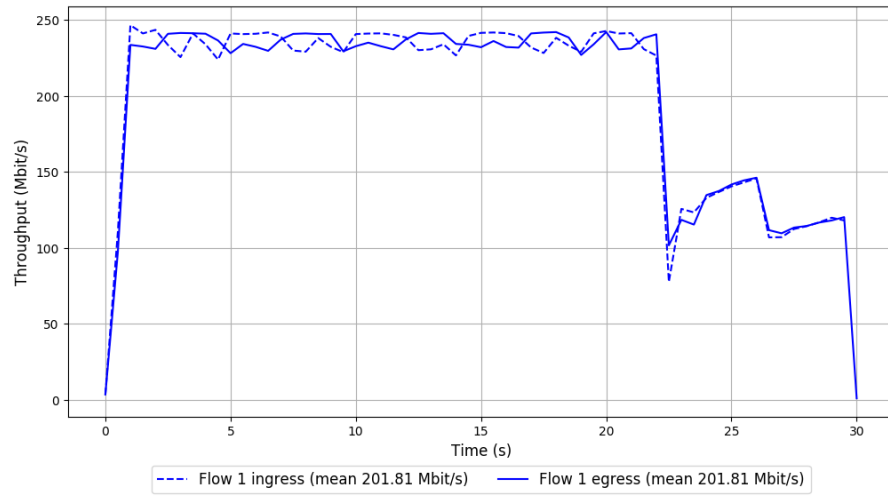
-- Flow 1:

Average throughput: 201.81 Mbit/s

95th percentile per-packet one-way delay: 60.477 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-13 07:55:40

End at: 2018-02-13 07:56:10

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.53 Mbit/s

95th percentile per-packet one-way delay: 52.310 ms

Loss rate: 0.55%

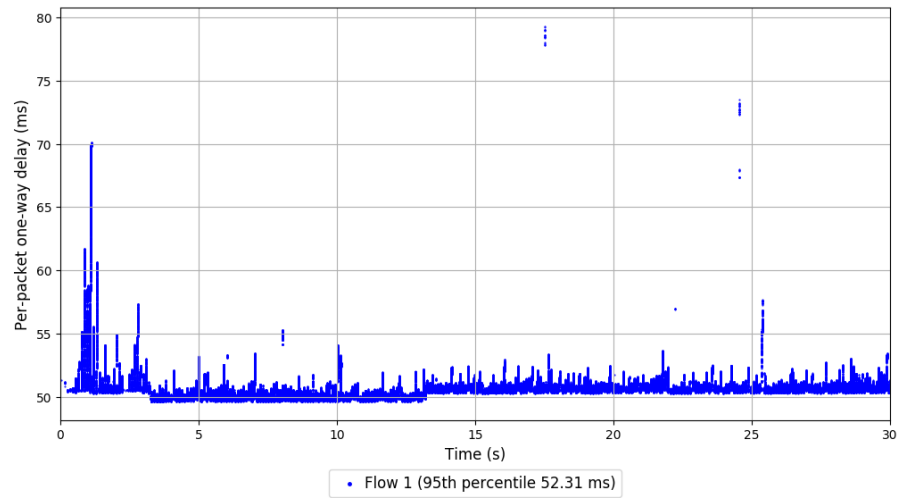
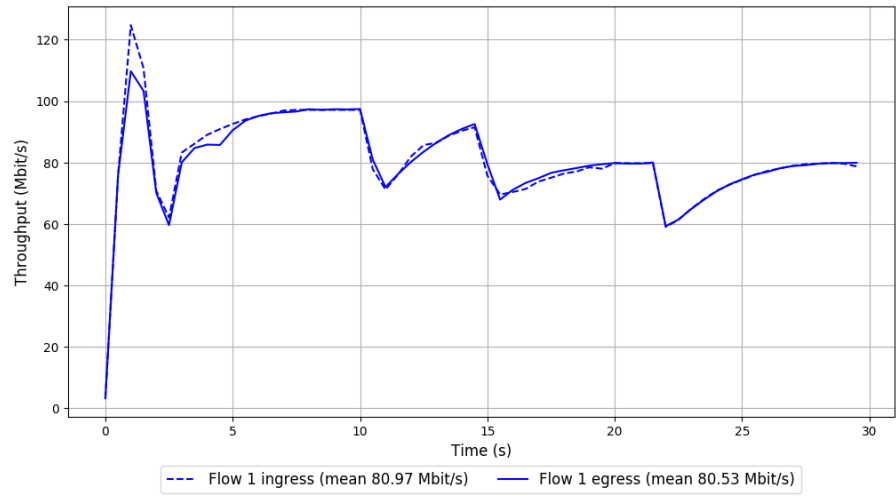
-- Flow 1:

Average throughput: 80.53 Mbit/s

95th percentile per-packet one-way delay: 52.310 ms

Loss rate: 0.55%

Run 10: Report of TCP Cubic — Data Link

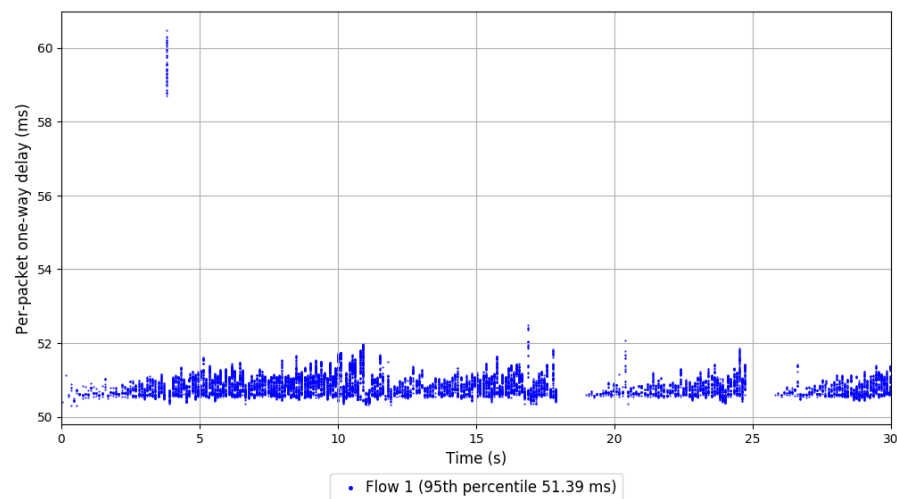
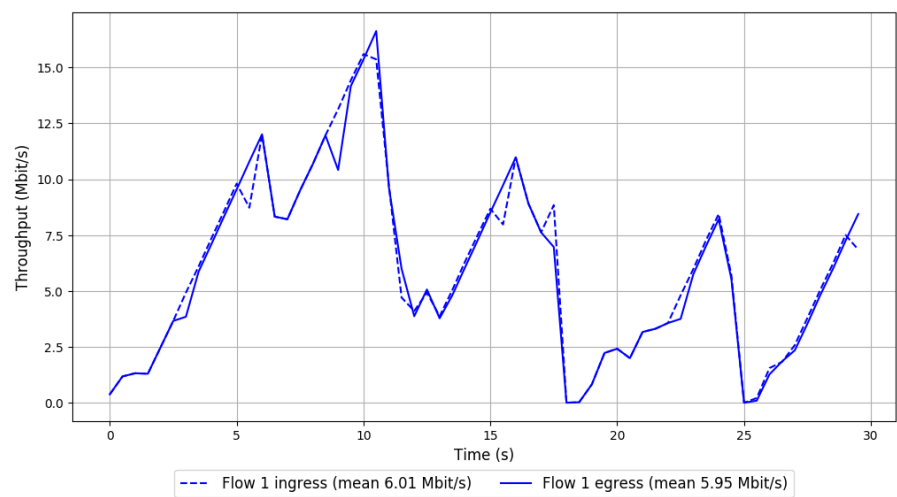


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-13 05:46:03
End at: 2018-02-13 05:46:33

# Below is generated by plot.py at 2018-02-13 09:52:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.95 Mbit/s
95th percentile per-packet one-way delay: 51.394 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 5.95 Mbit/s
95th percentile per-packet one-way delay: 51.394 ms
Loss rate: 1.08%
```


Run 1: Report of LEDBAT — Data Link

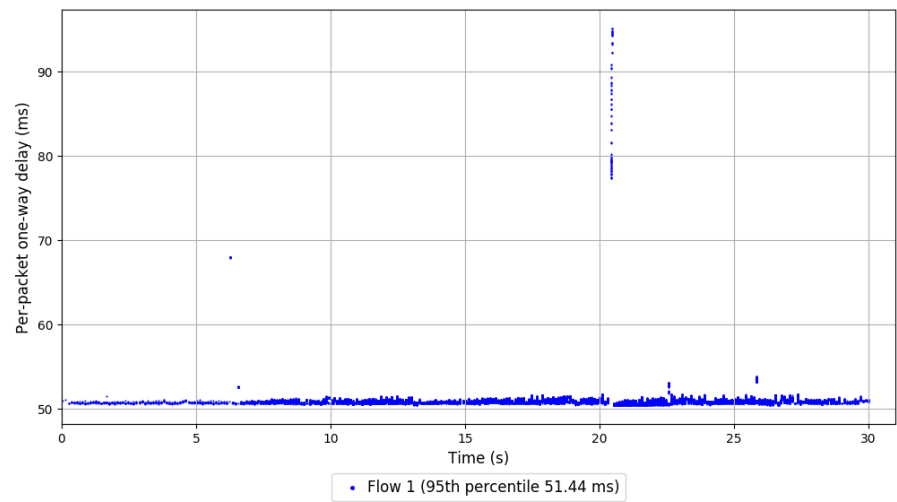
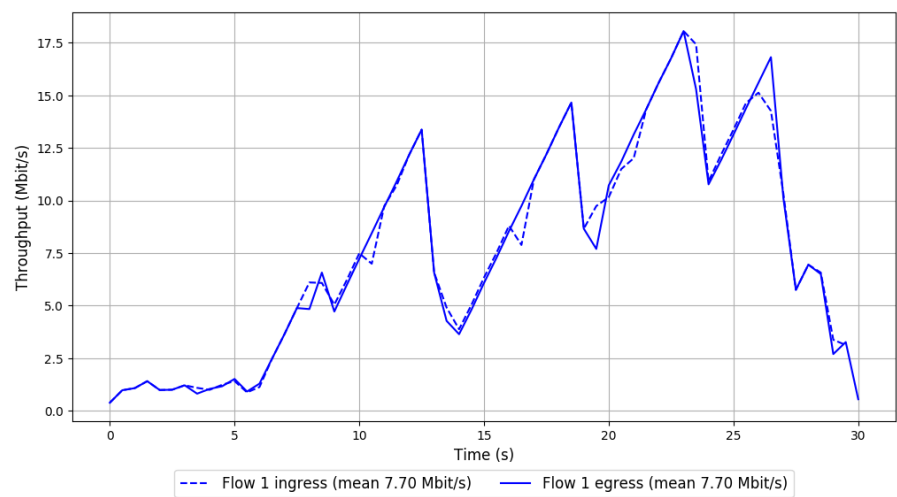


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-13 06:01:03
End at: 2018-02-13 06:01:33

# Below is generated by plot.py at 2018-02-13 09:52:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 51.439 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 51.439 ms
Loss rate: 0.06%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-13 06:15:41

End at: 2018-02-13 06:16:12

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 51.461 ms

Loss rate: 2.28%

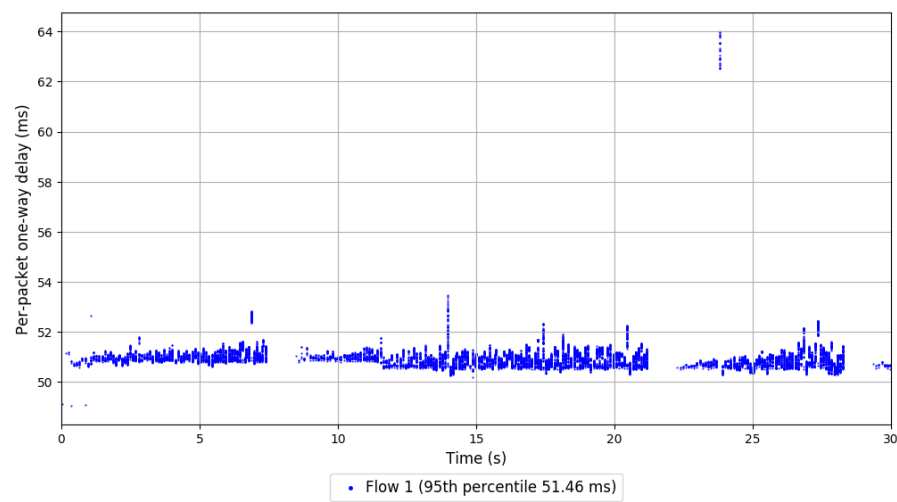
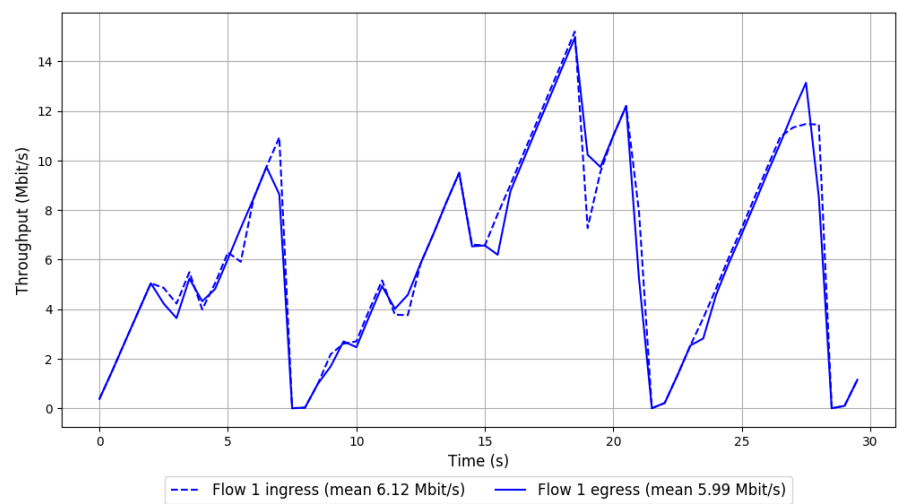
-- Flow 1:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 51.461 ms

Loss rate: 2.28%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-13 06:30:16

End at: 2018-02-13 06:30:46

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 51.867 ms

Loss rate: 0.58%

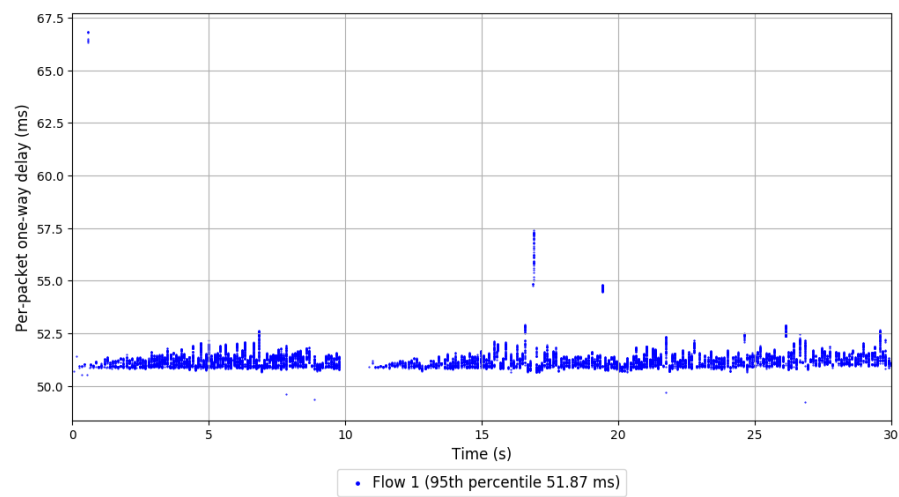
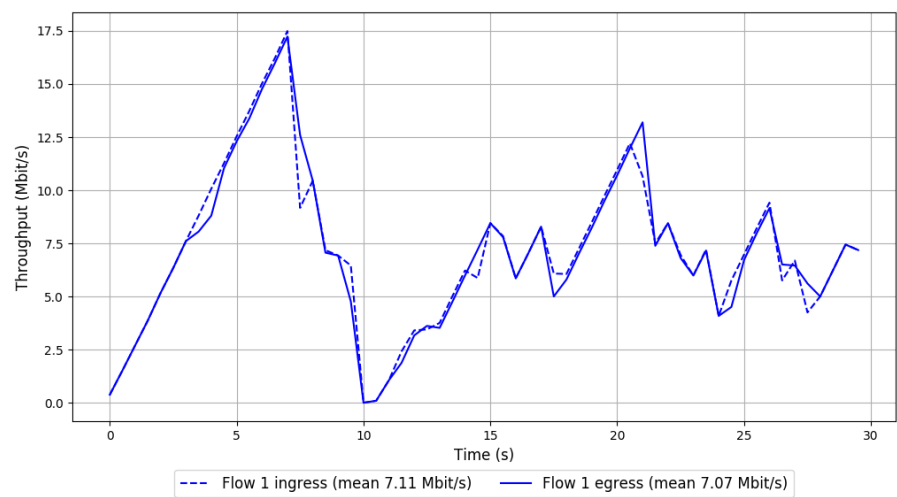
-- Flow 1:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 51.867 ms

Loss rate: 0.58%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-13 06:44:42

End at: 2018-02-13 06:45:12

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 0.00%

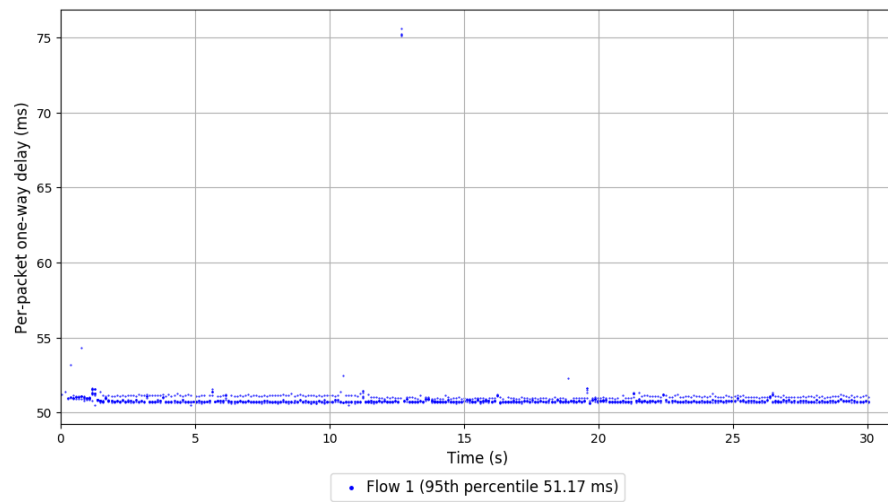
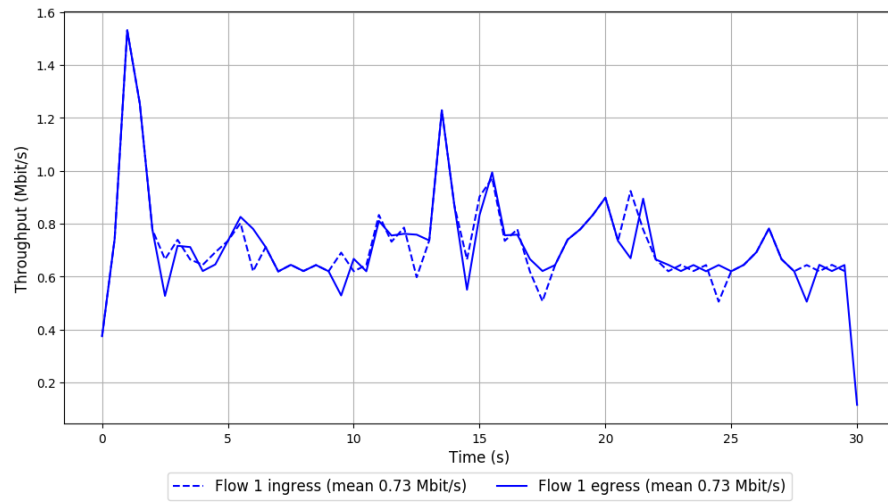
-- Flow 1:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-13 06:59:14

End at: 2018-02-13 06:59:44

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 51.726 ms

Loss rate: 1.72%

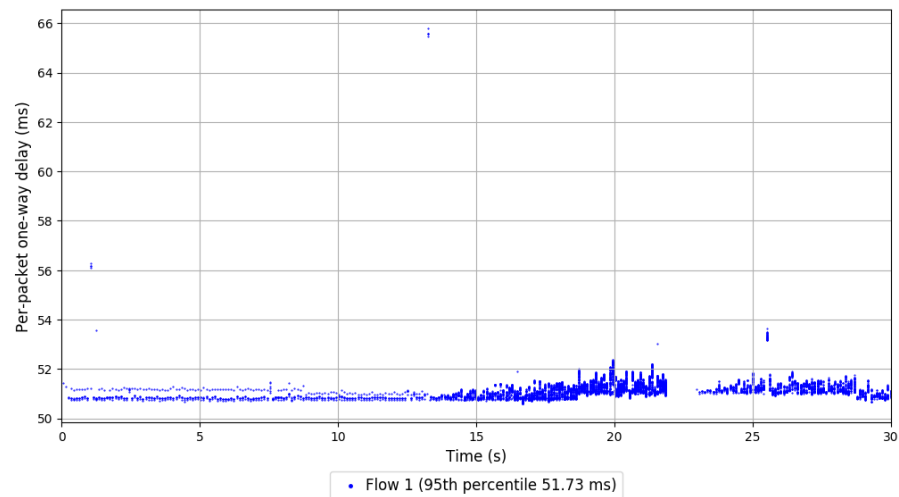
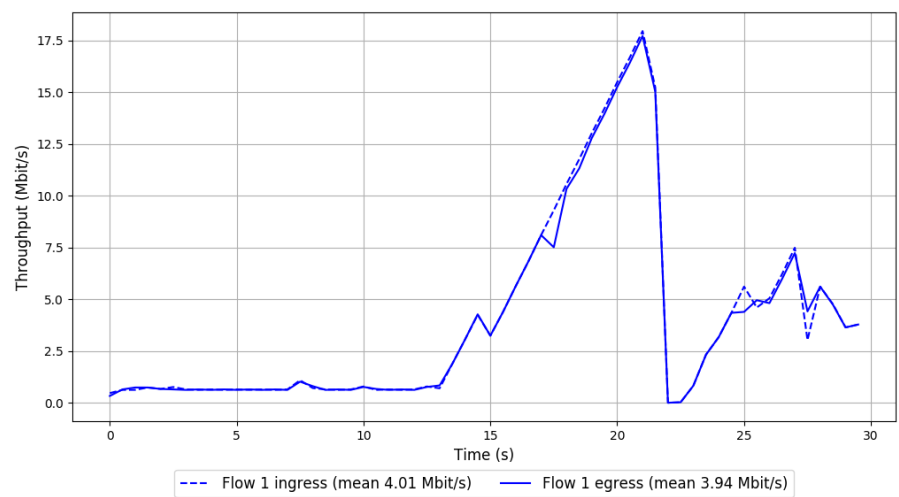
-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 51.726 ms

Loss rate: 1.72%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-13 07:13:35

End at: 2018-02-13 07:14:05

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 51.686 ms

Loss rate: 0.82%

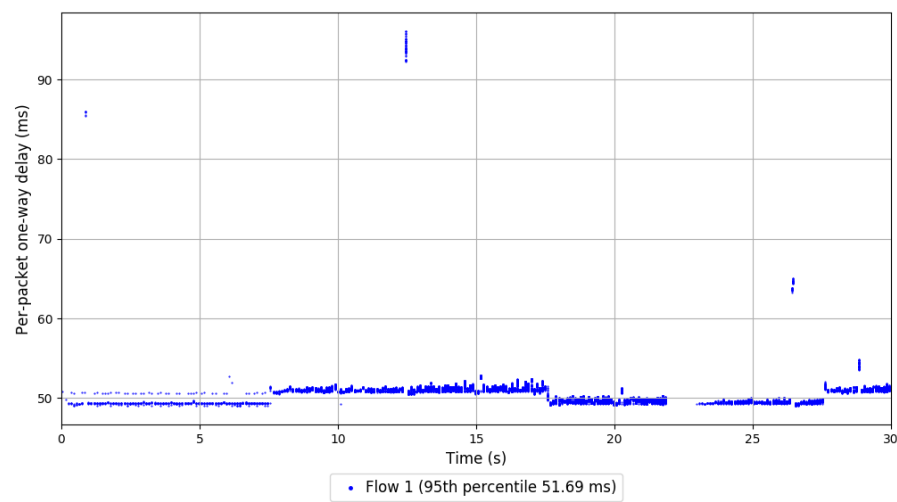
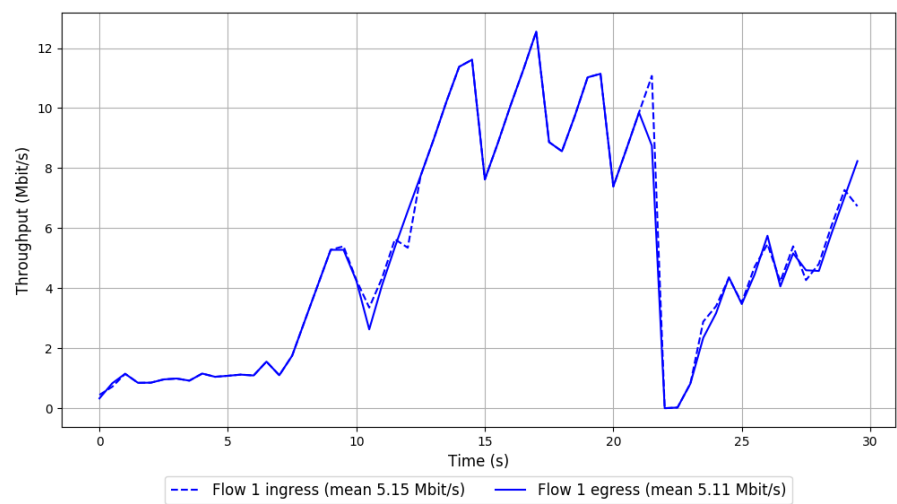
-- Flow 1:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 51.686 ms

Loss rate: 0.82%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-13 07:28:03

End at: 2018-02-13 07:28:33

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.618 ms

Loss rate: 0.58%

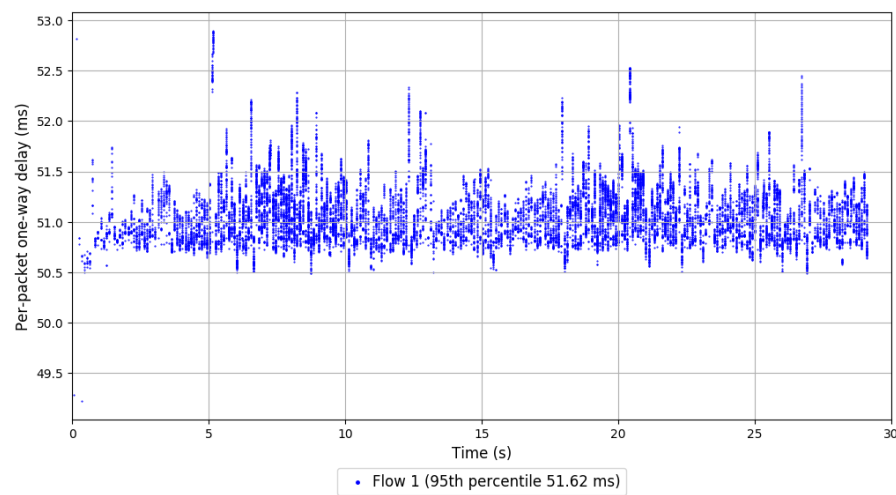
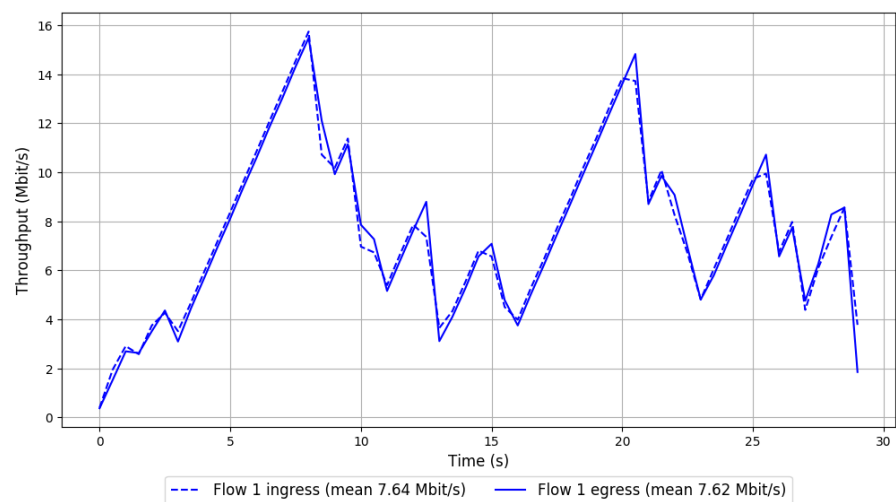
-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.618 ms

Loss rate: 0.58%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-13 07:42:36

End at: 2018-02-13 07:43:06

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.58 Mbit/s

95th percentile per-packet one-way delay: 51.453 ms

Loss rate: 0.28%

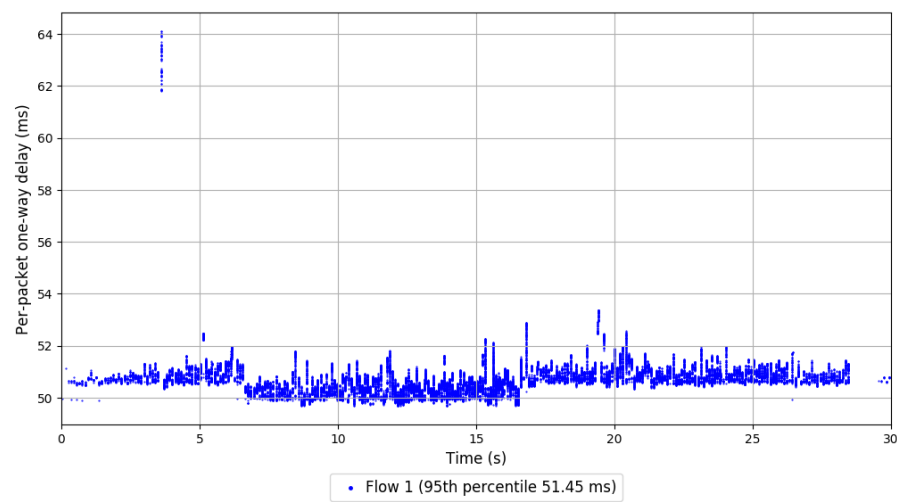
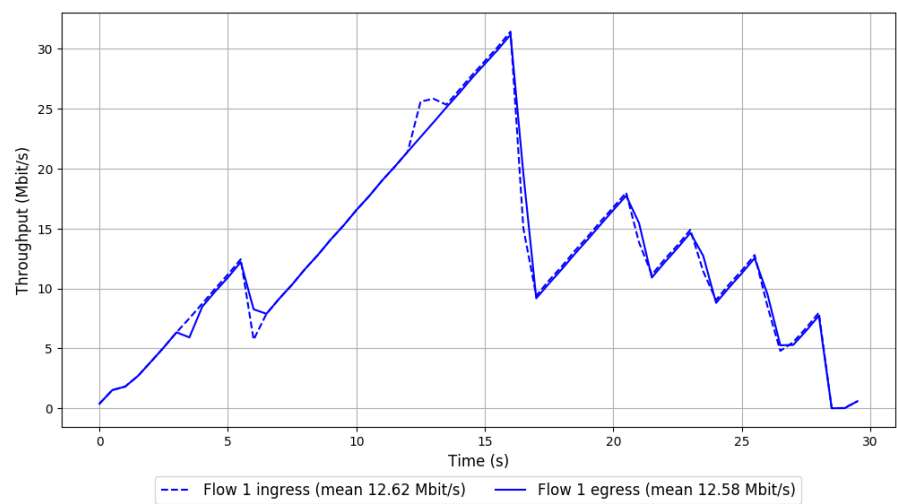
-- Flow 1:

Average throughput: 12.58 Mbit/s

95th percentile per-packet one-way delay: 51.453 ms

Loss rate: 0.28%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-13 07:57:09

End at: 2018-02-13 07:57:39

Below is generated by plot.py at 2018-02-13 09:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 51.395 ms

Loss rate: 1.41%

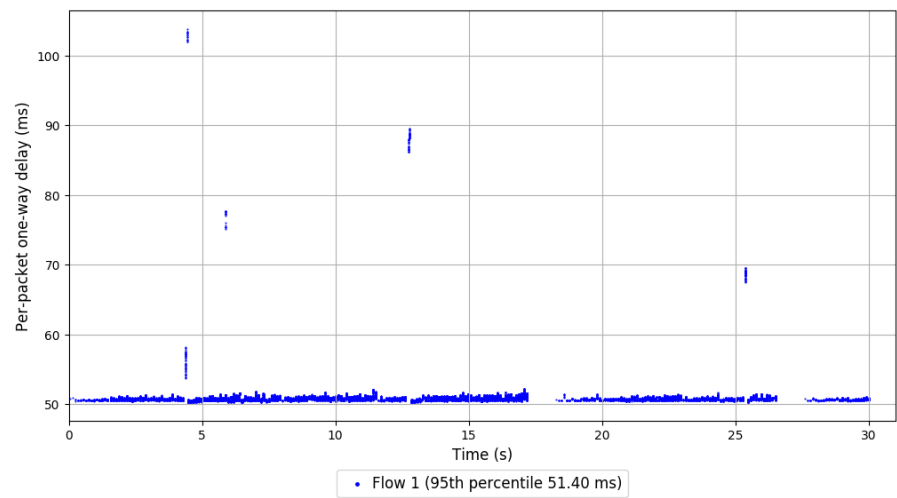
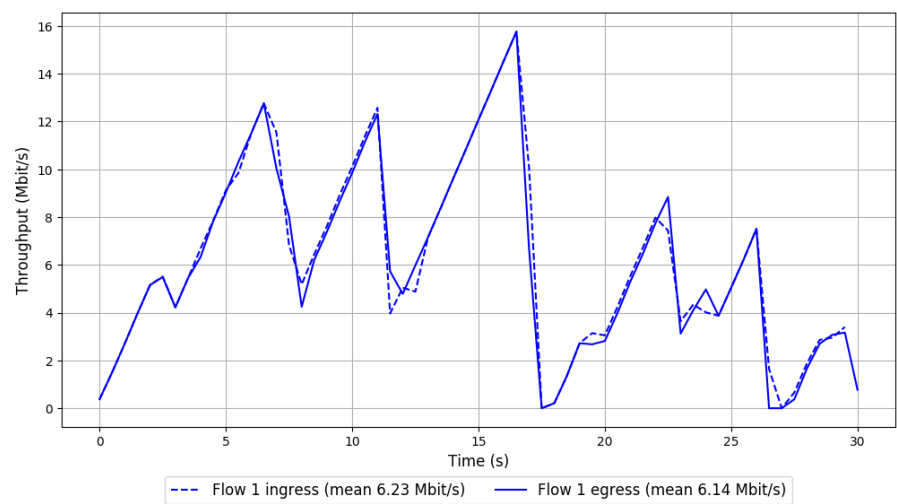
-- Flow 1:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 51.395 ms

Loss rate: 1.41%

Run 10: Report of LEDBAT — Data Link

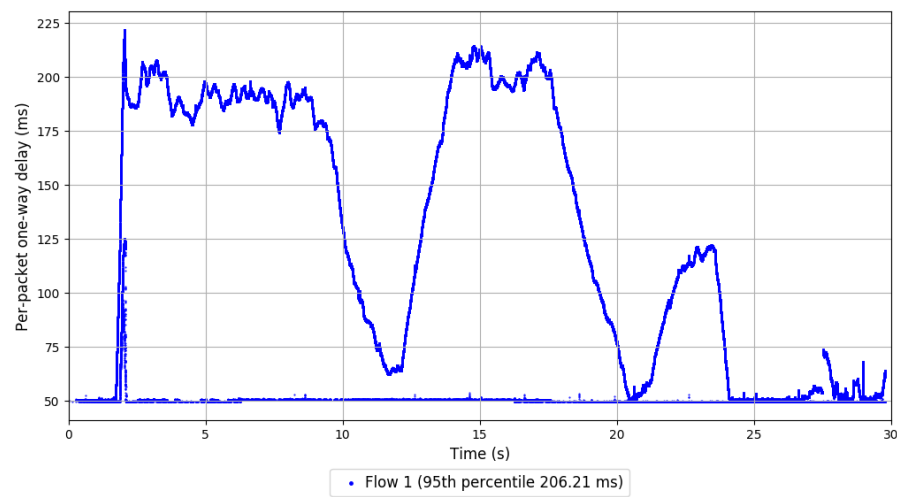
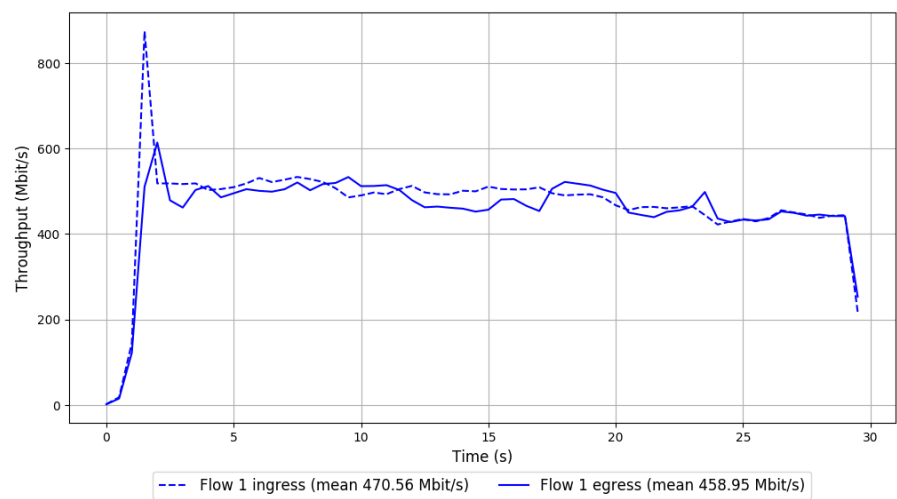


```
Run 1: Statistics of PCC

Start at: 2018-02-13 05:45:11
End at: 2018-02-13 05:45:41

# Below is generated by plot.py at 2018-02-13 09:57:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 458.95 Mbit/s
95th percentile per-packet one-way delay: 206.211 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 458.95 Mbit/s
95th percentile per-packet one-way delay: 206.211 ms
Loss rate: 2.46%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-13 06:00:12

End at: 2018-02-13 06:00:43

Below is generated by plot.py at 2018-02-13 09:57:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 429.97 Mbit/s

95th percentile per-packet one-way delay: 192.952 ms

Loss rate: 1.25%

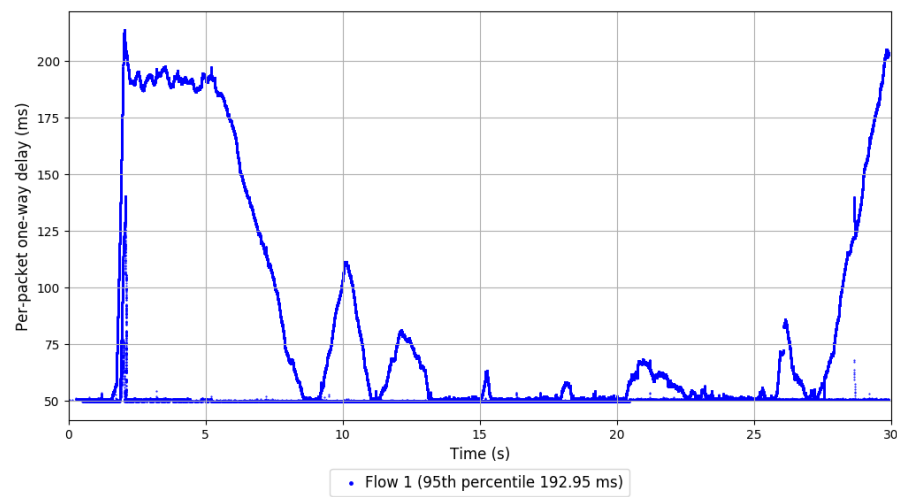
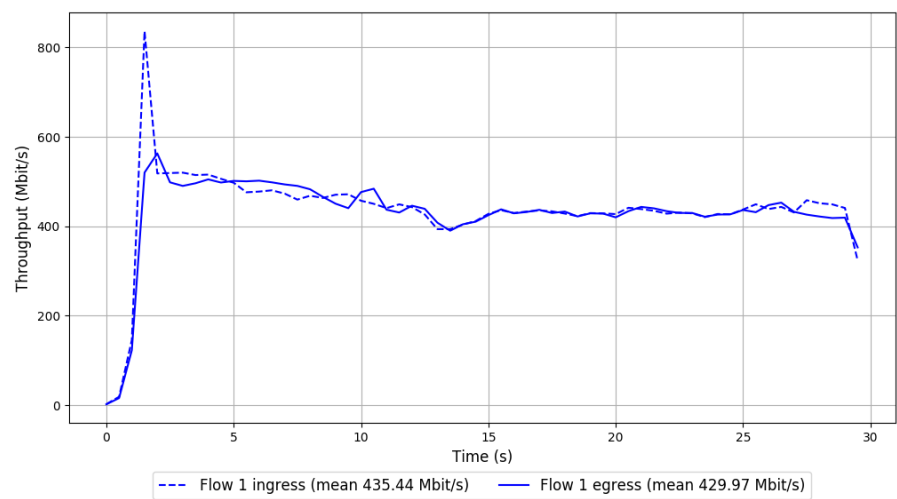
-- Flow 1:

Average throughput: 429.97 Mbit/s

95th percentile per-packet one-way delay: 192.952 ms

Loss rate: 1.25%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-13 06:14:51

End at: 2018-02-13 06:15:21

Below is generated by plot.py at 2018-02-13 09:57:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 405.31 Mbit/s

95th percentile per-packet one-way delay: 101.378 ms

Loss rate: 0.03%

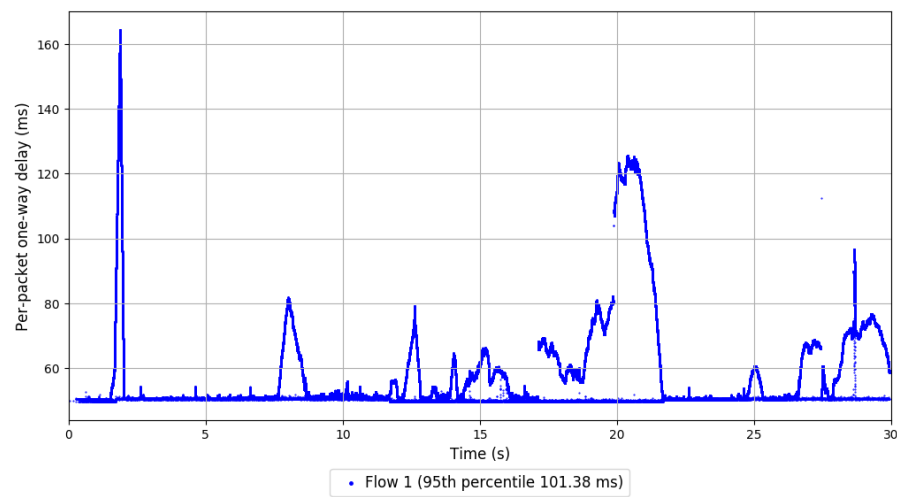
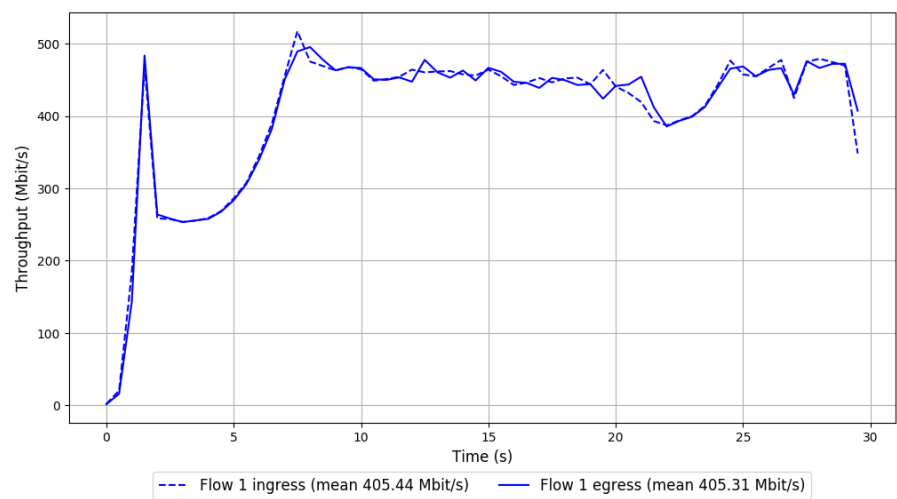
-- Flow 1:

Average throughput: 405.31 Mbit/s

95th percentile per-packet one-way delay: 101.378 ms

Loss rate: 0.03%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-13 06:29:24

End at: 2018-02-13 06:29:54

Below is generated by plot.py at 2018-02-13 09:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 451.37 Mbit/s

95th percentile per-packet one-way delay: 200.020 ms

Loss rate: 3.31%

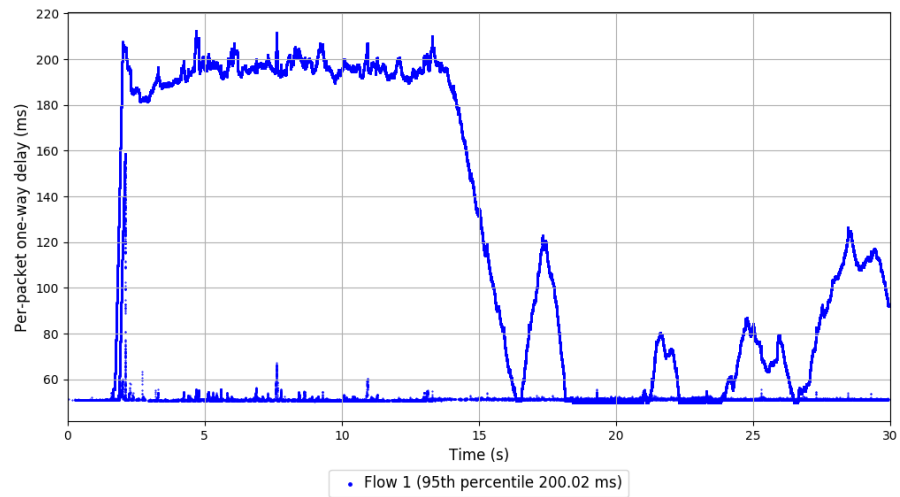
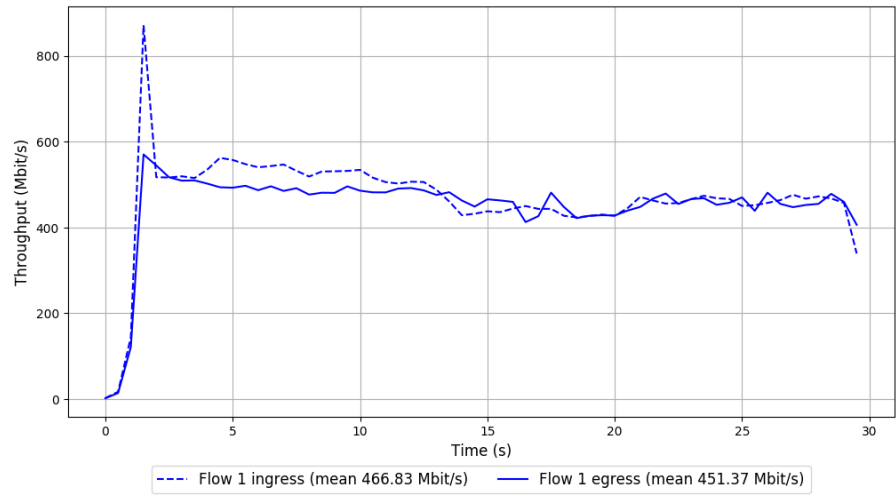
-- Flow 1:

Average throughput: 451.37 Mbit/s

95th percentile per-packet one-way delay: 200.020 ms

Loss rate: 3.31%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-13 06:43:52

End at: 2018-02-13 06:44:22

Below is generated by plot.py at 2018-02-13 09:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 394.81 Mbit/s

95th percentile per-packet one-way delay: 84.233 ms

Loss rate: 0.07%

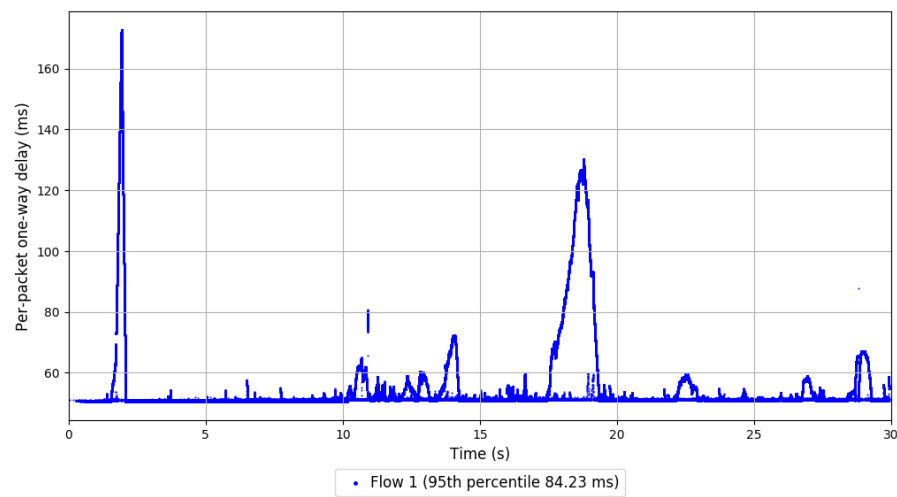
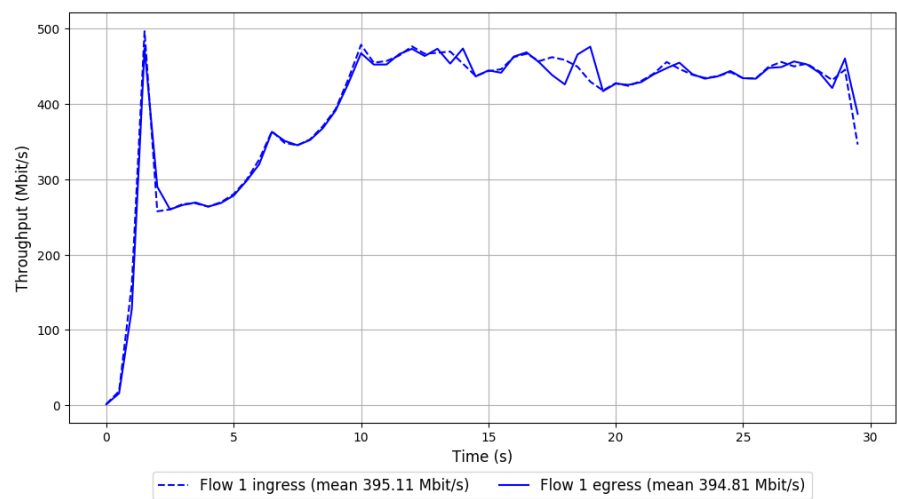
-- Flow 1:

Average throughput: 394.81 Mbit/s

95th percentile per-packet one-way delay: 84.233 ms

Loss rate: 0.07%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-13 06:58:24

End at: 2018-02-13 06:58:54

Below is generated by plot.py at 2018-02-13 09:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 404.25 Mbit/s

95th percentile per-packet one-way delay: 61.916 ms

Loss rate: 0.00%

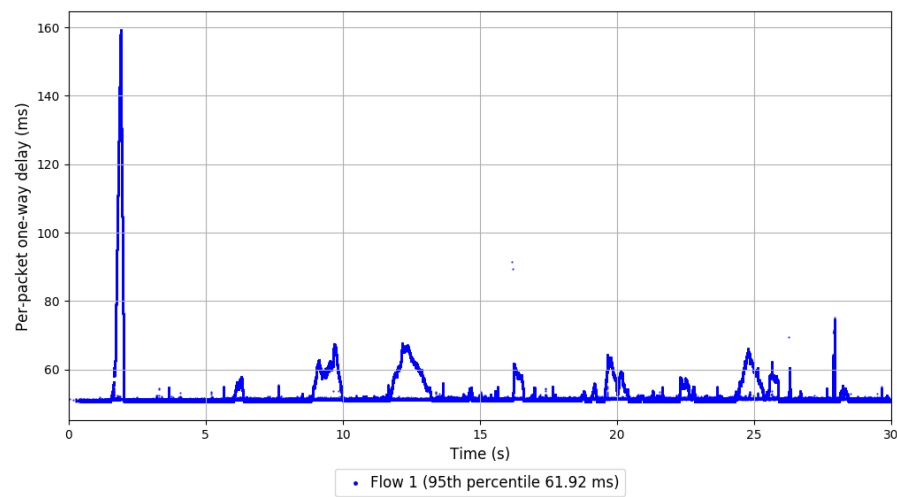
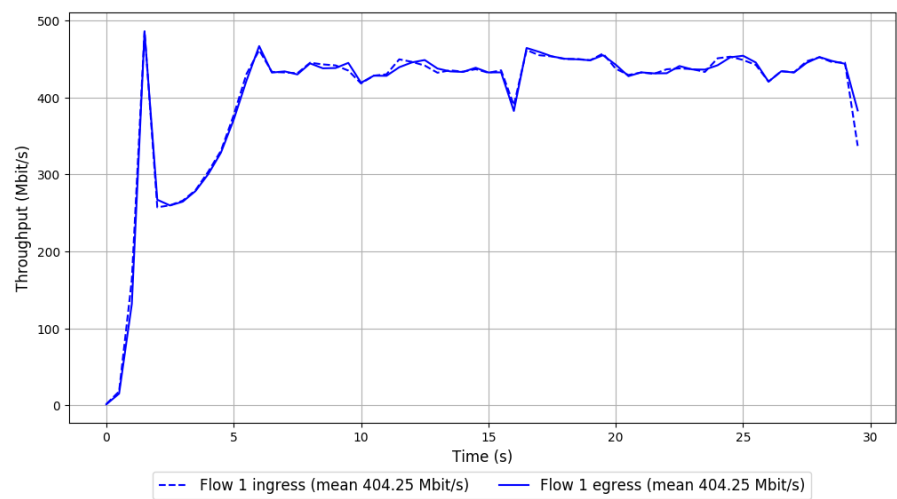
-- Flow 1:

Average throughput: 404.25 Mbit/s

95th percentile per-packet one-way delay: 61.916 ms

Loss rate: 0.00%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-13 07:12:51

End at: 2018-02-13 07:13:21

Below is generated by plot.py at 2018-02-13 09:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 70.354 ms

Loss rate: 0.00%

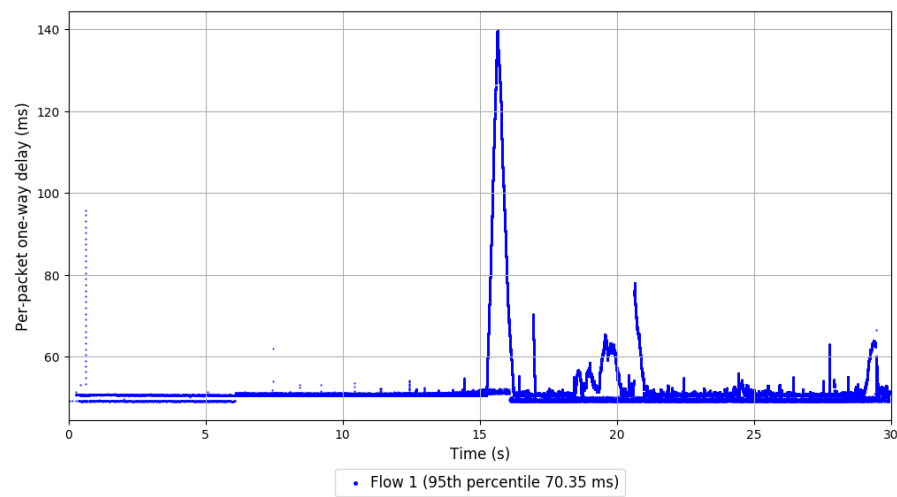
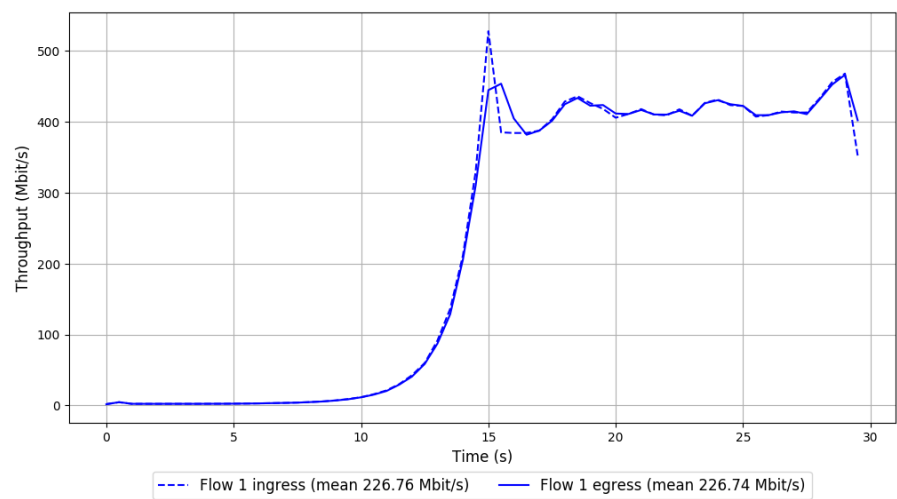
-- Flow 1:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 70.354 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-13 07:27:11

End at: 2018-02-13 07:27:41

Below is generated by plot.py at 2018-02-13 10:00:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 455.56 Mbit/s

95th percentile per-packet one-way delay: 193.011 ms

Loss rate: 0.77%

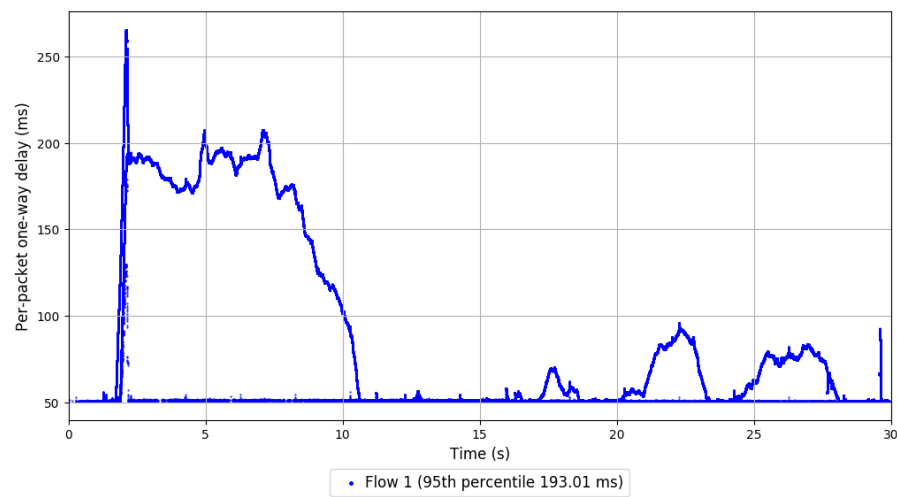
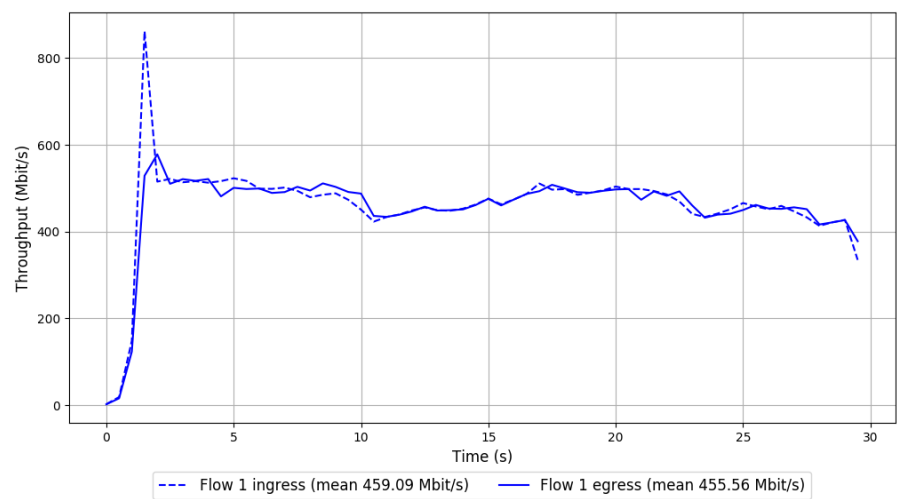
-- Flow 1:

Average throughput: 455.56 Mbit/s

95th percentile per-packet one-way delay: 193.011 ms

Loss rate: 0.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-13 07:41:47

End at: 2018-02-13 07:42:17

Below is generated by plot.py at 2018-02-13 10:01:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 392.55 Mbit/s

95th percentile per-packet one-way delay: 84.654 ms

Loss rate: 0.00%

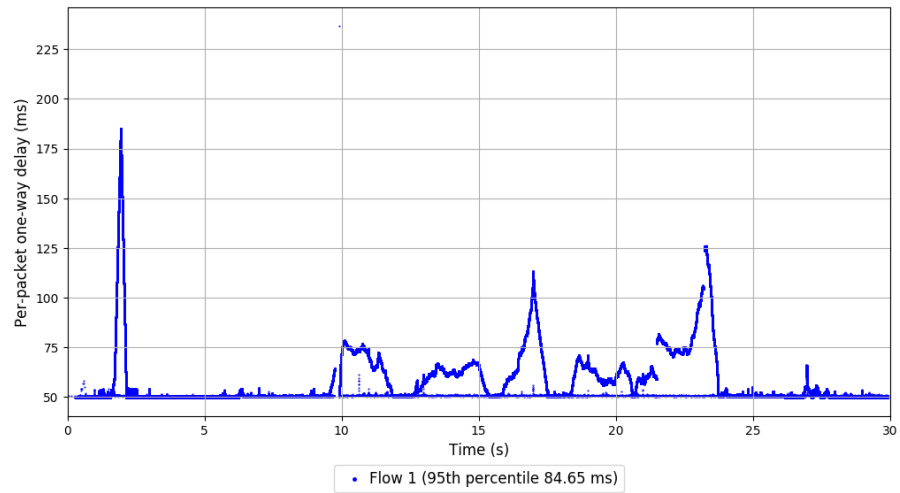
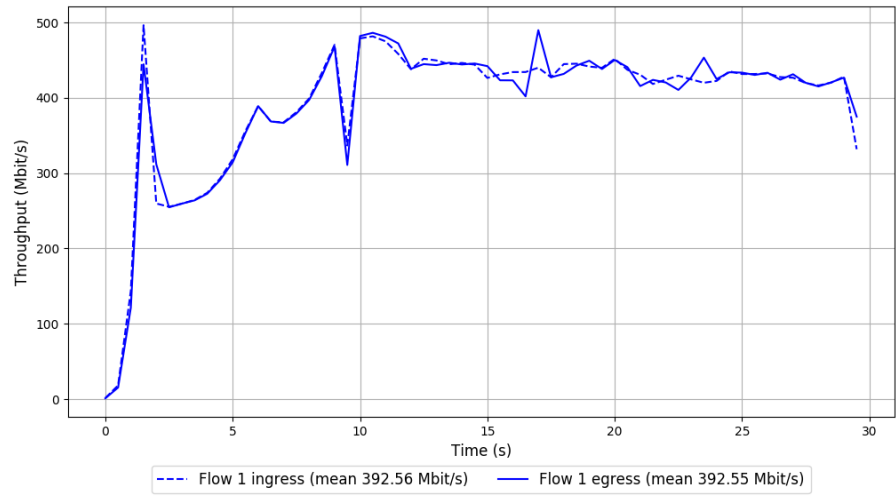
-- Flow 1:

Average throughput: 392.55 Mbit/s

95th percentile per-packet one-way delay: 84.654 ms

Loss rate: 0.00%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-13 07:56:20

End at: 2018-02-13 07:56:50

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 350.36 Mbit/s

95th percentile per-packet one-way delay: 81.555 ms

Loss rate: 0.00%

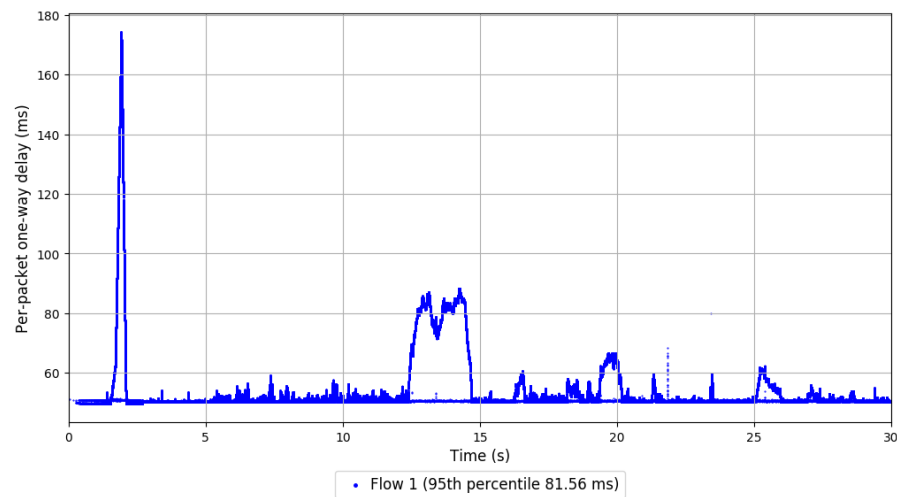
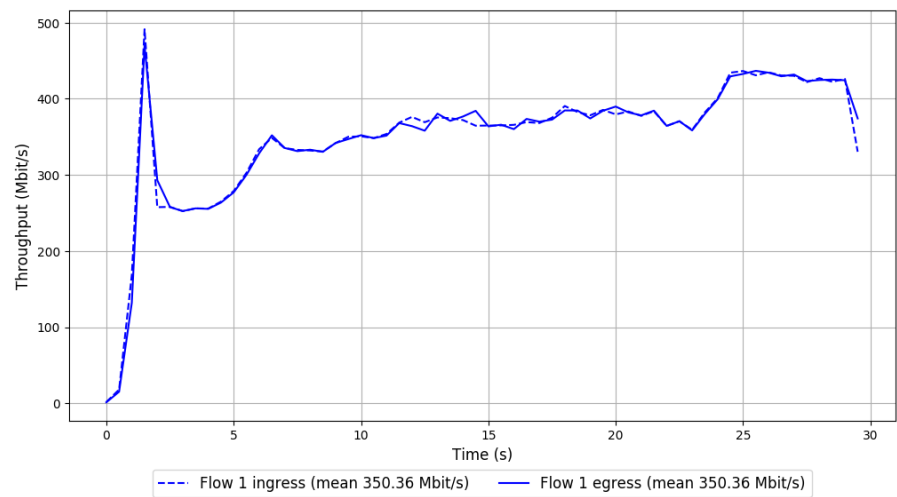
-- Flow 1:

Average throughput: 350.36 Mbit/s

95th percentile per-packet one-way delay: 81.555 ms

Loss rate: 0.00%

Run 10: Report of PCC — Data Link

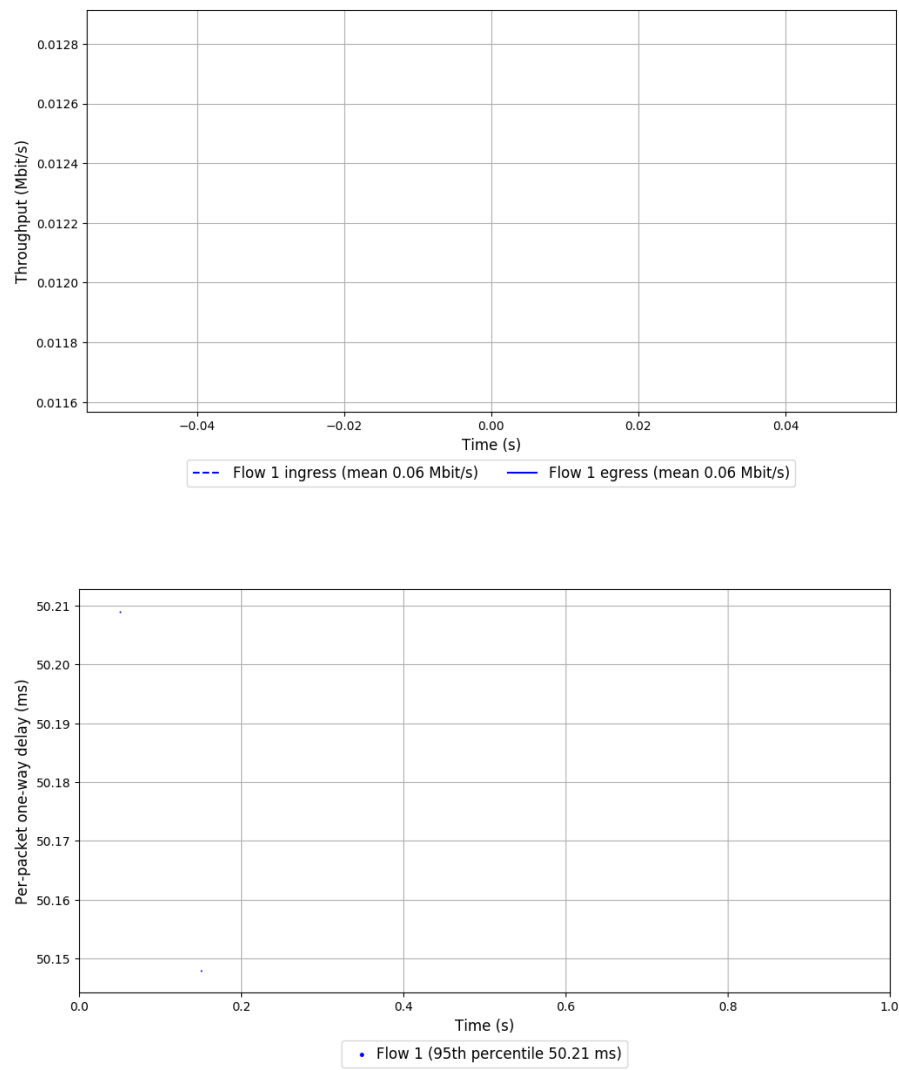


Run 1: Statistics of QUIC Cubic

Start at: 2018-02-13 05:40:15

End at: 2018-02-13 05:40:45

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-13 05:55:06

End at: 2018-02-13 05:55:36

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.63 Mbit/s

95th percentile per-packet one-way delay: 50.780 ms

Loss rate: 0.00%

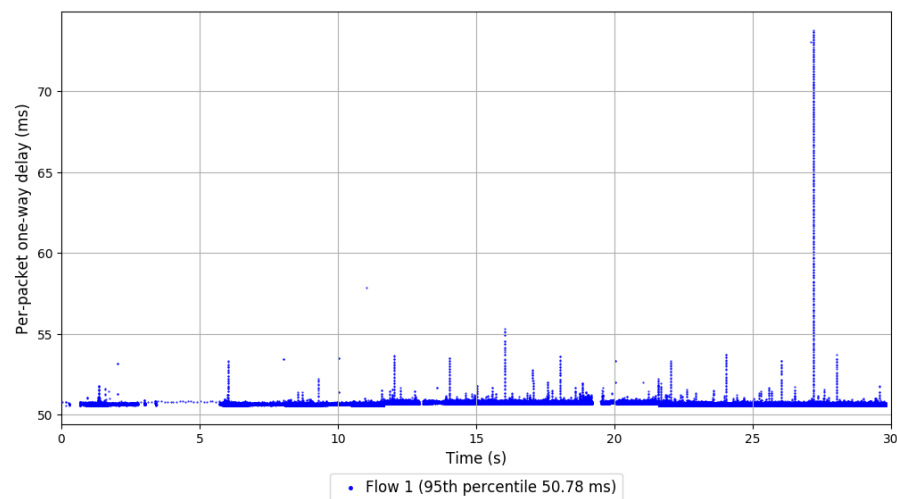
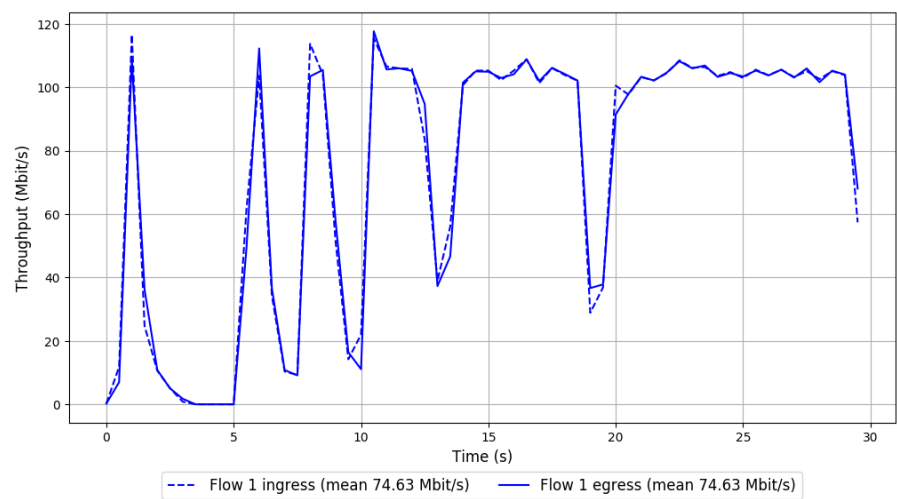
-- Flow 1:

Average throughput: 74.63 Mbit/s

95th percentile per-packet one-way delay: 50.780 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-13 06:09:48

End at: 2018-02-13 06:10:18

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.39 Mbit/s

95th percentile per-packet one-way delay: 50.827 ms

Loss rate: 0.00%

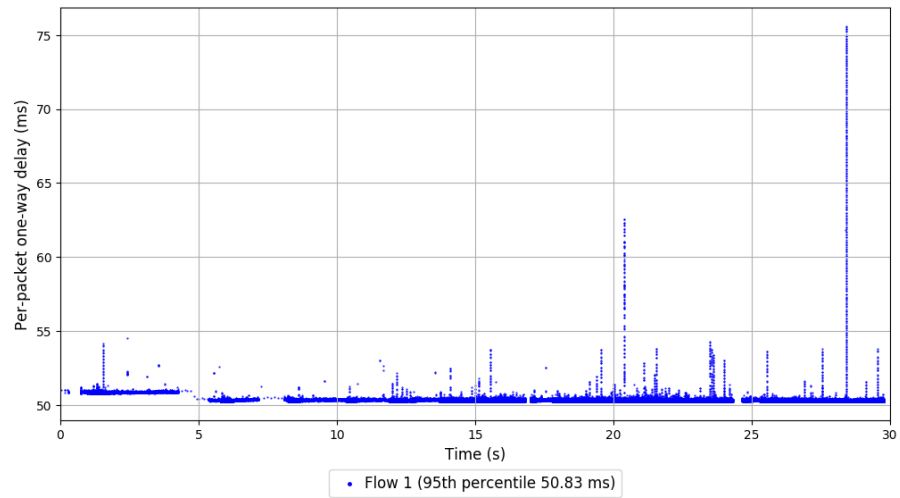
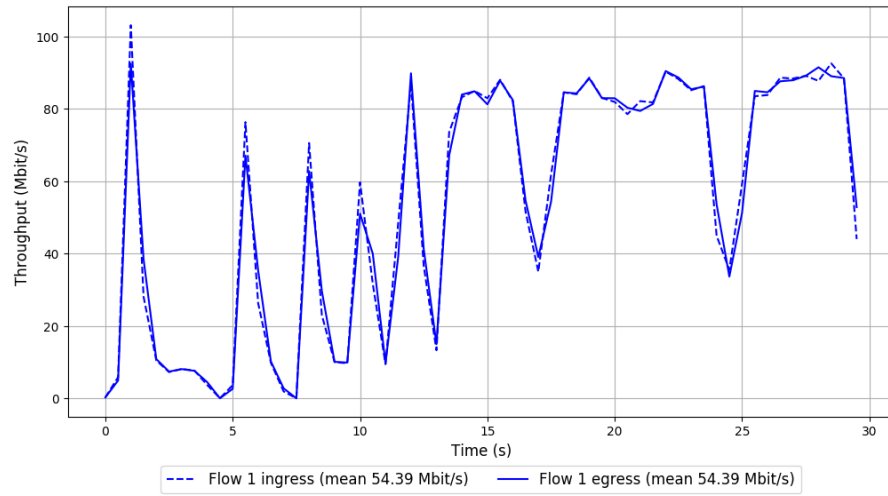
-- Flow 1:

Average throughput: 54.39 Mbit/s

95th percentile per-packet one-way delay: 50.827 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-13 06:24:34

End at: 2018-02-13 06:25:04

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.00%

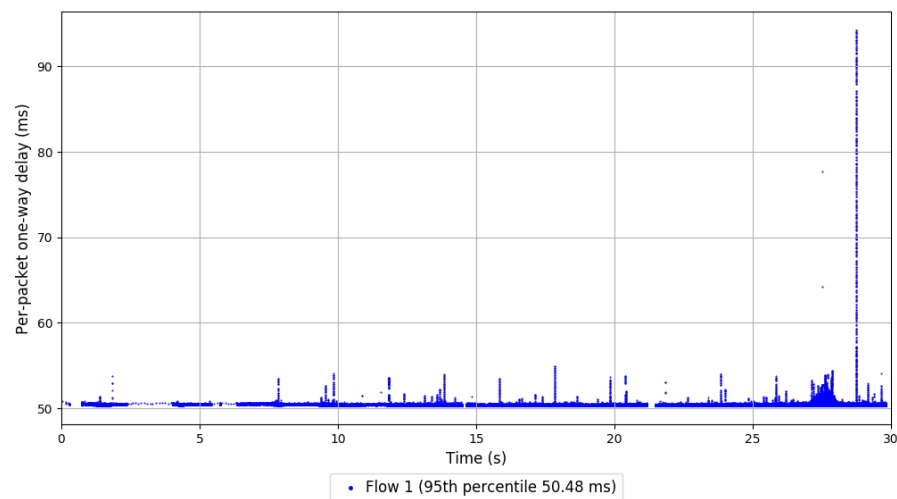
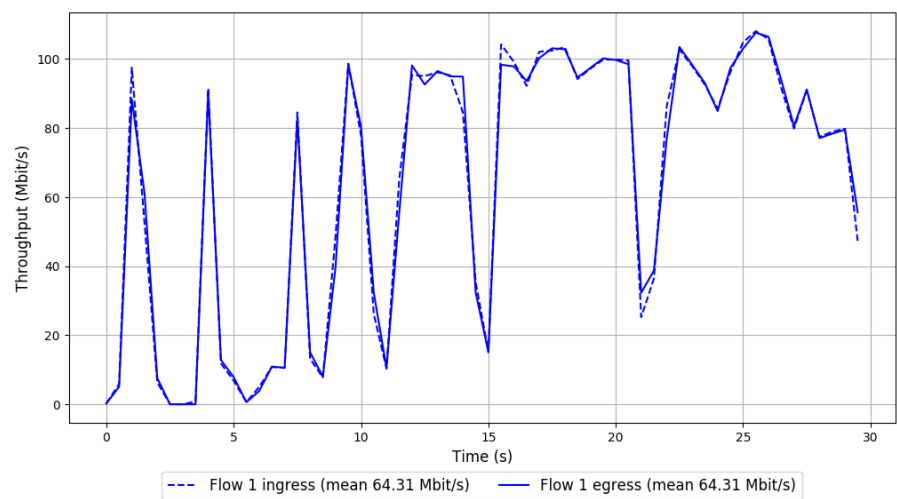
-- Flow 1:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-13 06:38:58

End at: 2018-02-13 06:39:28

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.82 Mbit/s

95th percentile per-packet one-way delay: 51.076 ms

Loss rate: 0.00%

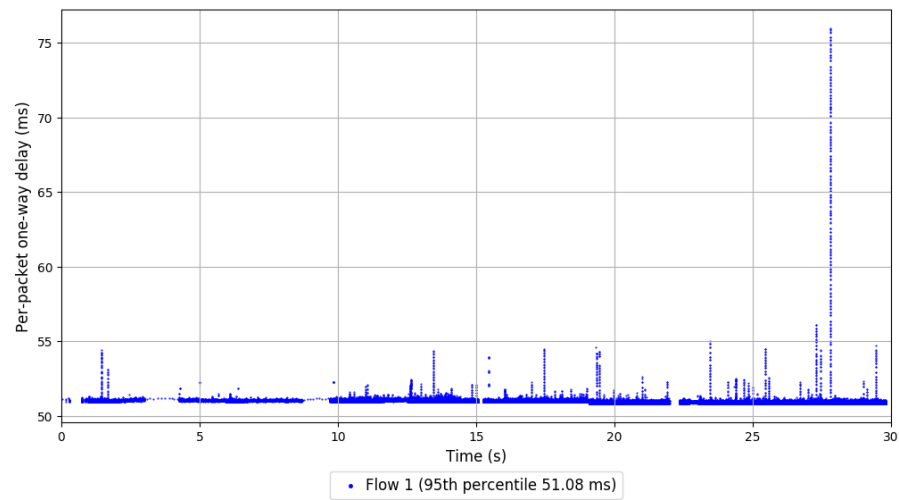
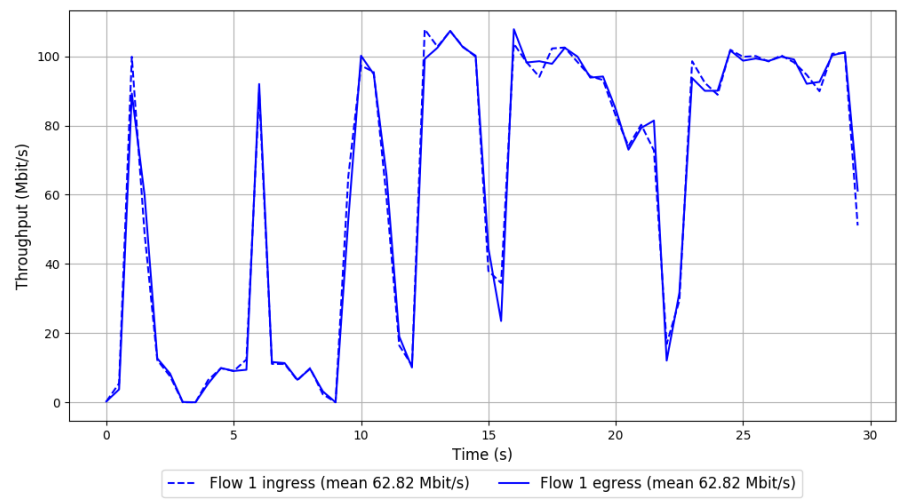
-- Flow 1:

Average throughput: 62.82 Mbit/s

95th percentile per-packet one-way delay: 51.076 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-13 06:53:26

End at: 2018-02-13 06:53:56

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.36 Mbit/s

95th percentile per-packet one-way delay: 51.078 ms

Loss rate: 0.00%

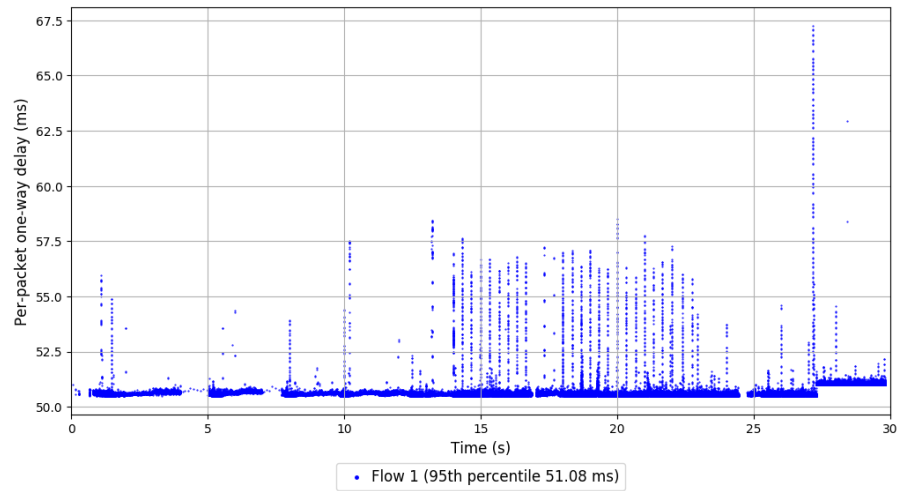
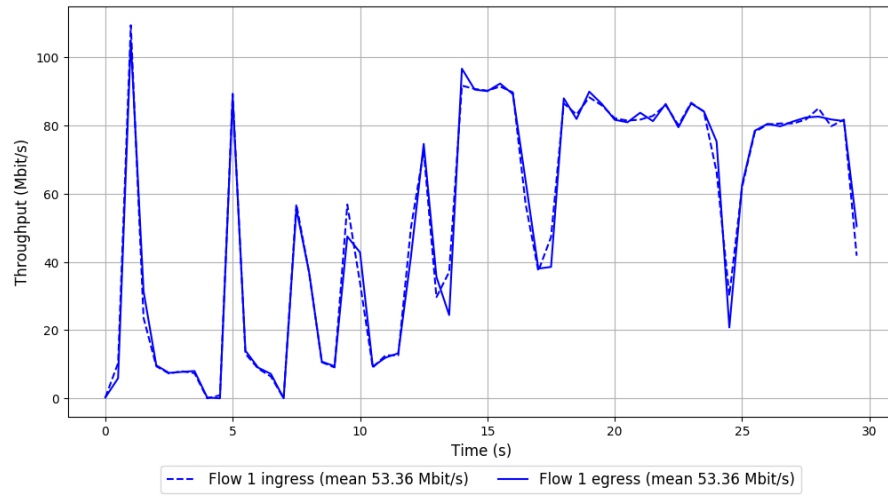
-- Flow 1:

Average throughput: 53.36 Mbit/s

95th percentile per-packet one-way delay: 51.078 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-13 07:07:55

End at: 2018-02-13 07:08:25

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.85 Mbit/s

95th percentile per-packet one-way delay: 50.617 ms

Loss rate: 0.01%

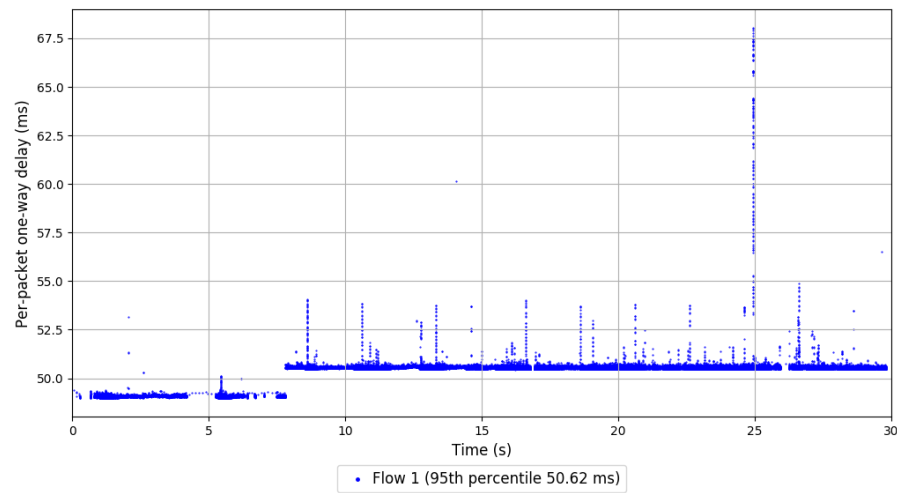
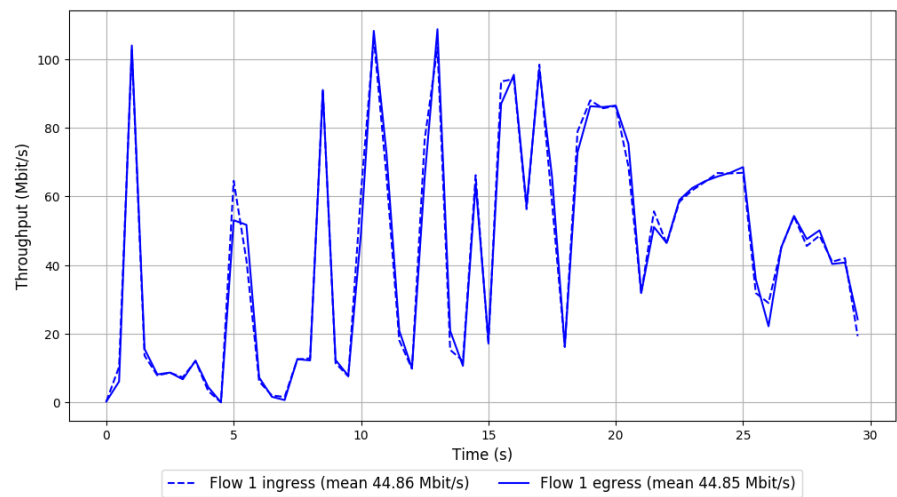
-- Flow 1:

Average throughput: 44.85 Mbit/s

95th percentile per-packet one-way delay: 50.617 ms

Loss rate: 0.01%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-13 07:22:17

End at: 2018-02-13 07:22:47

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 51.036 ms

Loss rate: 0.00%

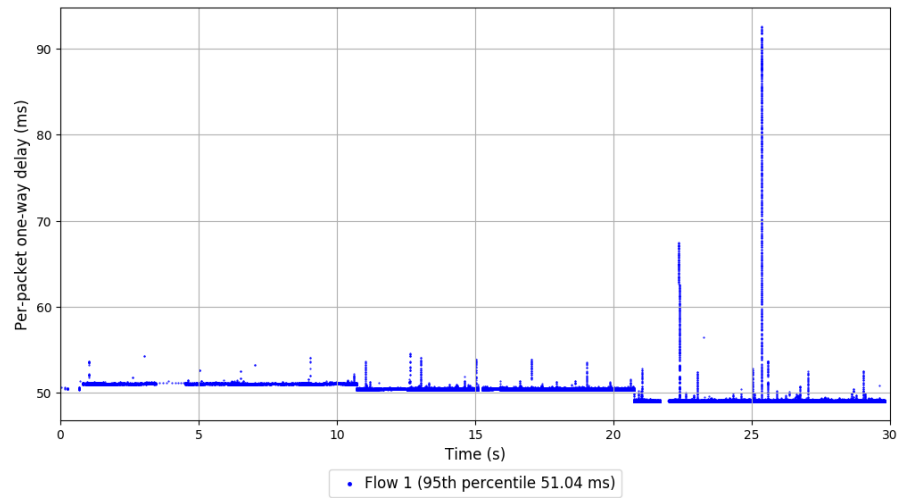
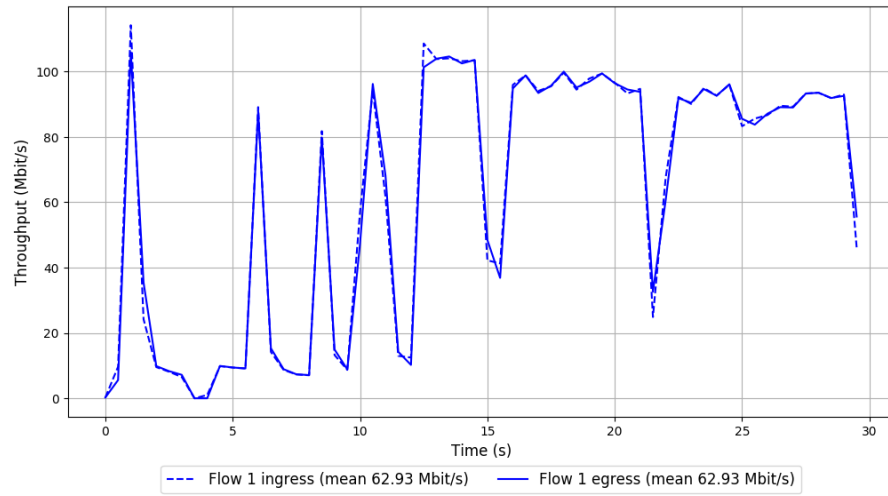
-- Flow 1:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 51.036 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-13 07:36:45

End at: 2018-02-13 07:37:15

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.41 Mbit/s

95th percentile per-packet one-way delay: 50.859 ms

Loss rate: 0.01%

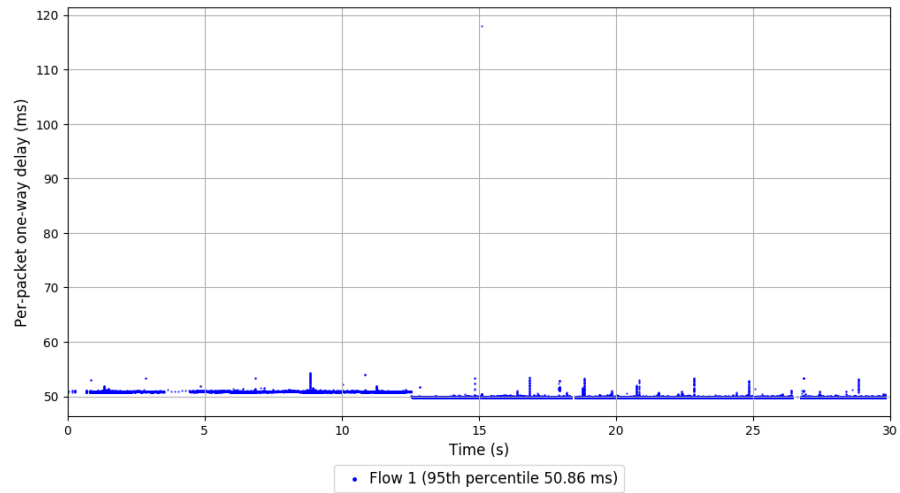
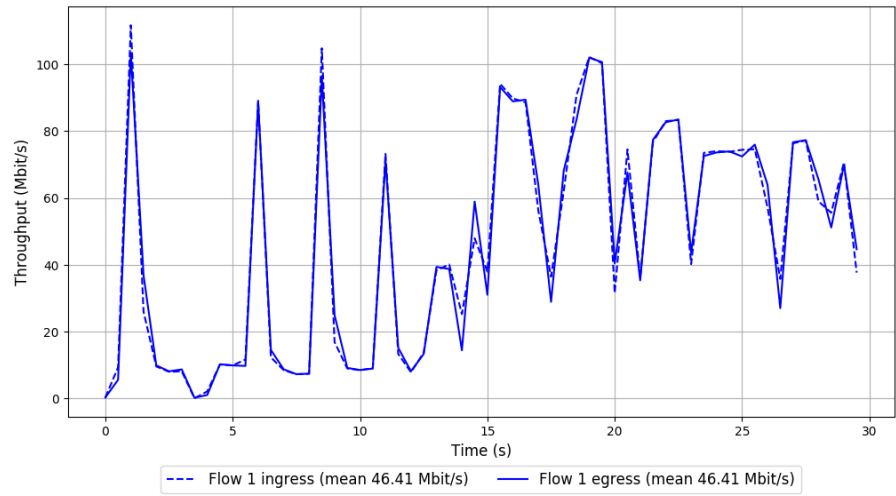
-- Flow 1:

Average throughput: 46.41 Mbit/s

95th percentile per-packet one-way delay: 50.859 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link

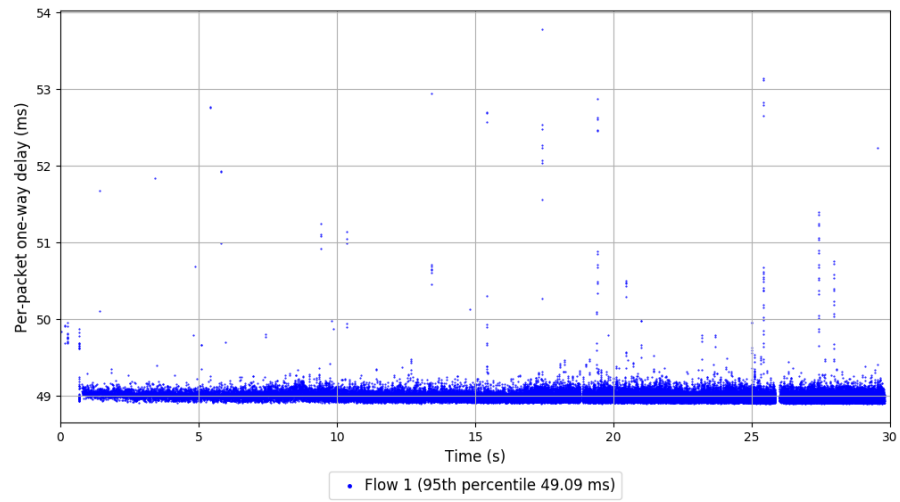
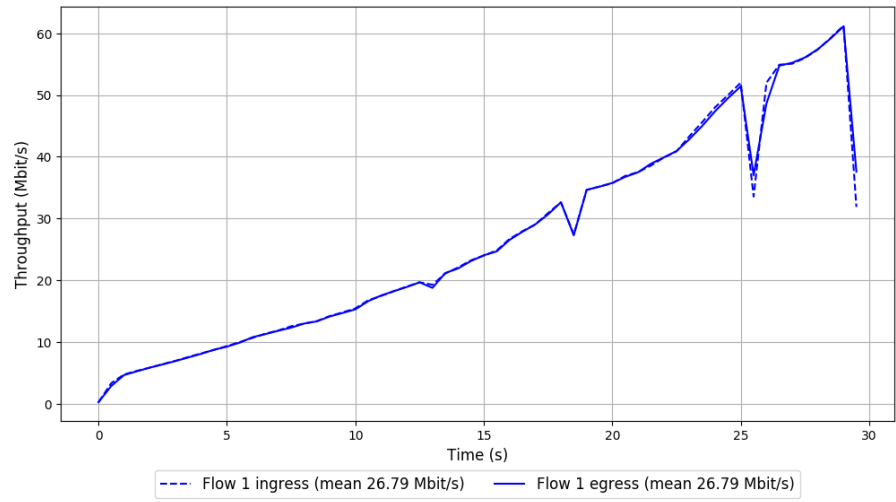


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-13 07:51:22
End at: 2018-02-13 07:51:52

# Below is generated by plot.py at 2018-02-13 10:02:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.79 Mbit/s
95th percentile per-packet one-way delay: 49.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.79 Mbit/s
95th percentile per-packet one-way delay: 49.088 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

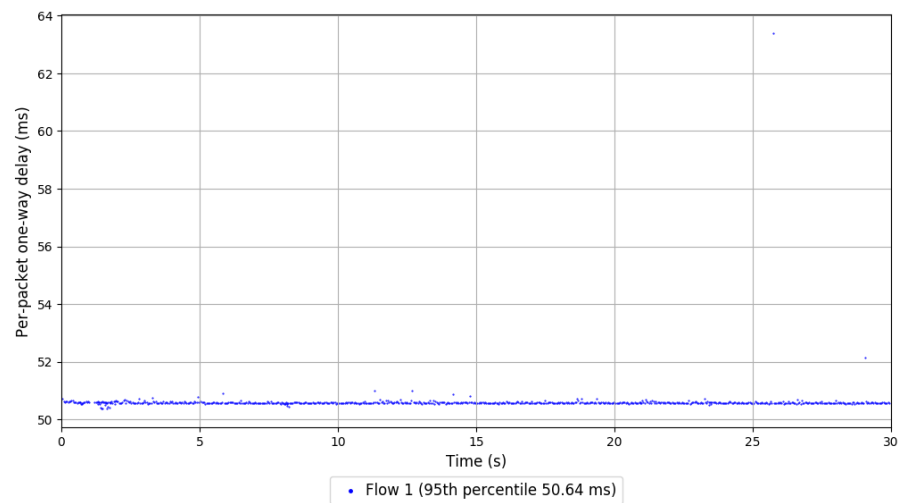
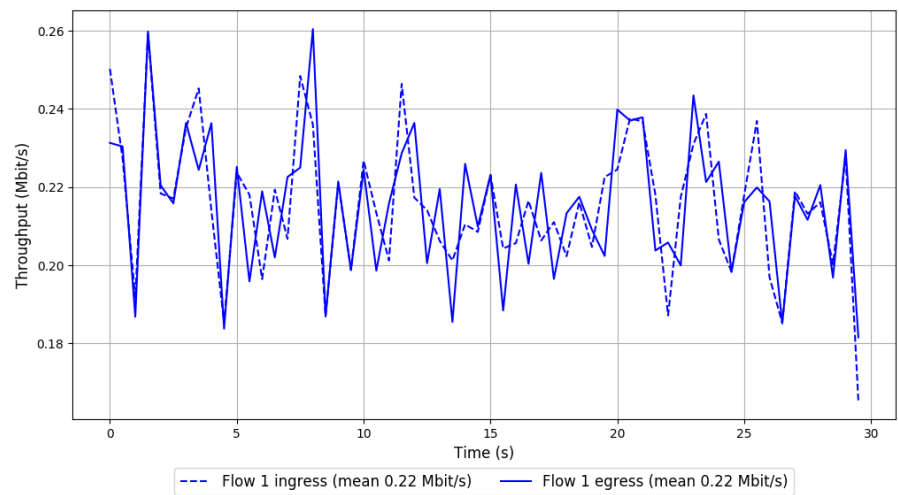


```
Run 1: Statistics of SCReAM

Start at: 2018-02-13 05:46:40
End at: 2018-02-13 05:47:10

# Below is generated by plot.py at 2018-02-13 10:02:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.641 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.641 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-02-13 06:01:40

End at: 2018-02-13 06:02:11

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.897 ms

Loss rate: 0.00%

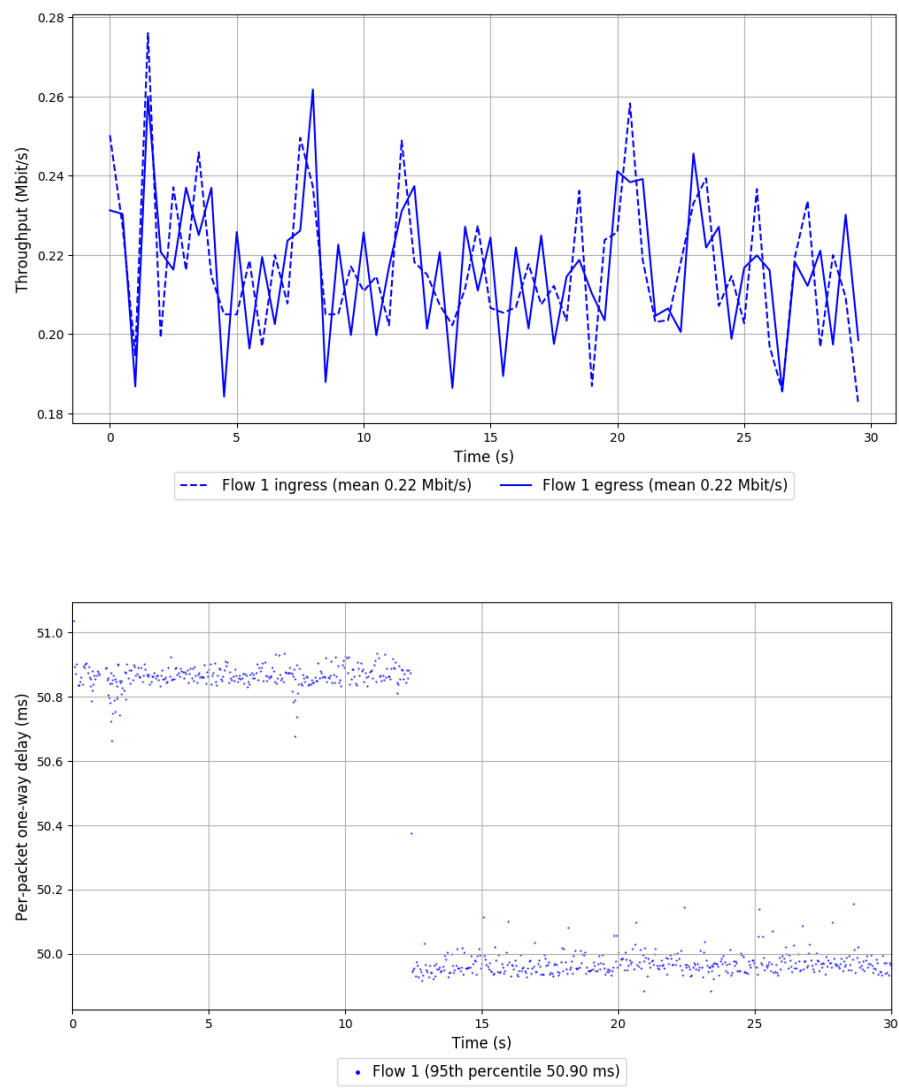
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.897 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-13 06:16:19

End at: 2018-02-13 06:16:49

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 0.00%

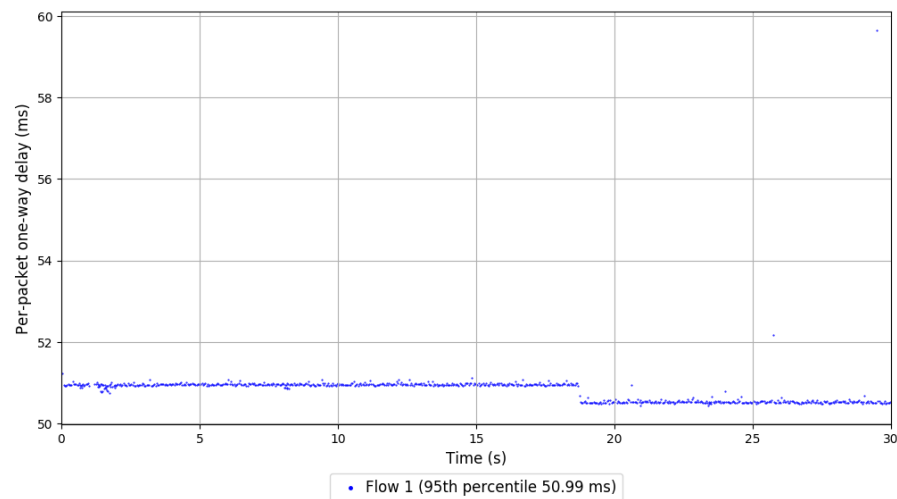
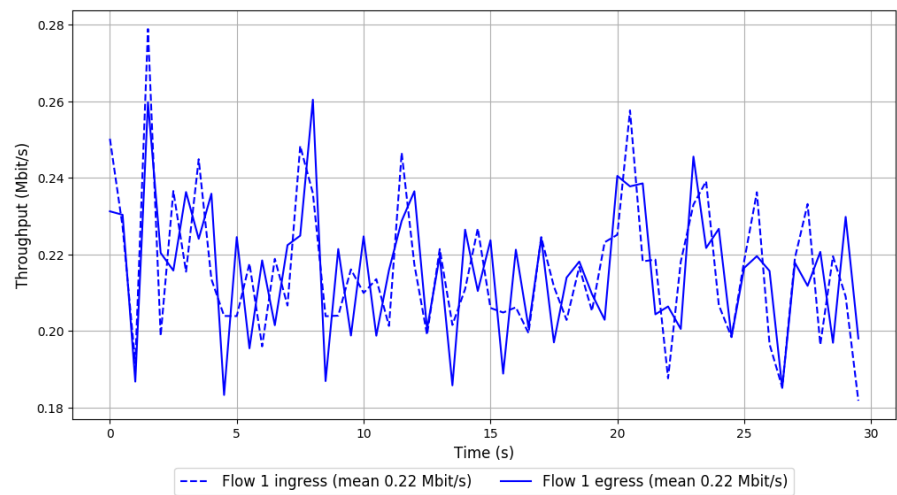
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-13 06:30:54

End at: 2018-02-13 06:31:24

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.900 ms

Loss rate: 0.00%

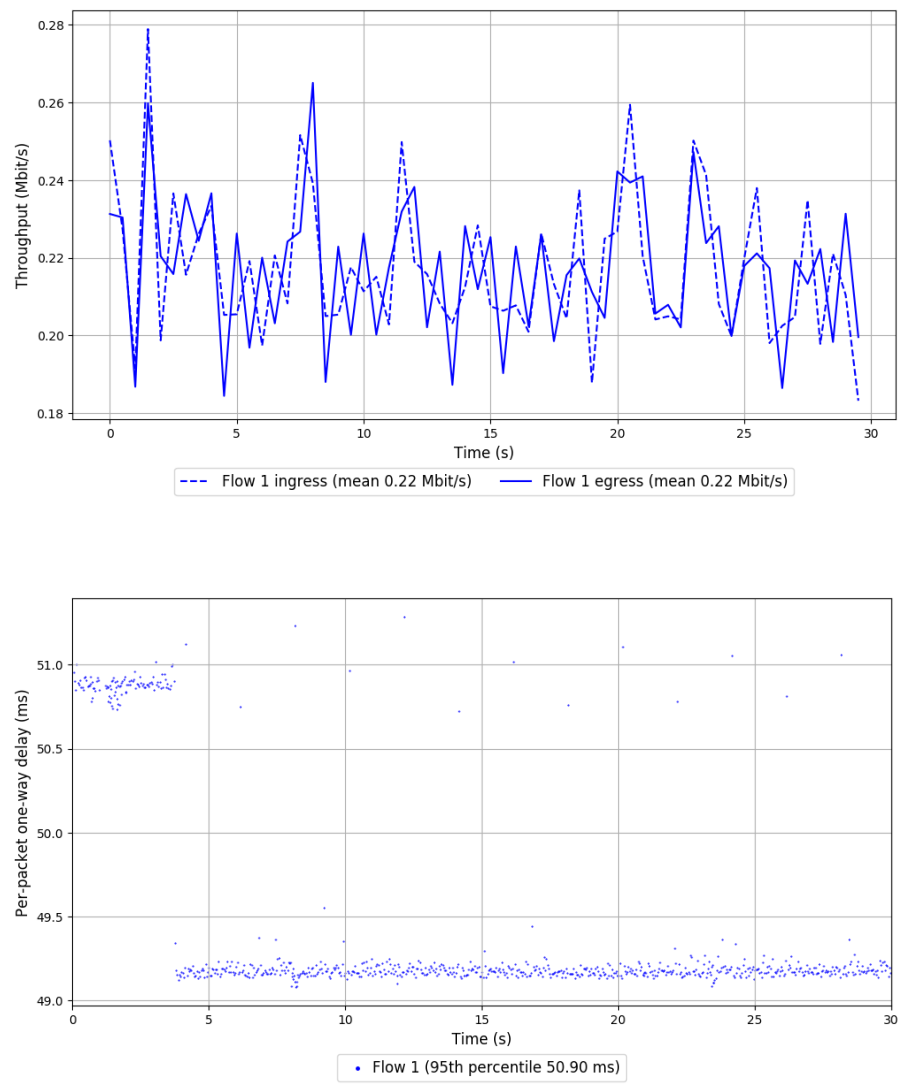
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.900 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-13 06:45:18

End at: 2018-02-13 06:45:48

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.302 ms

Loss rate: 0.00%

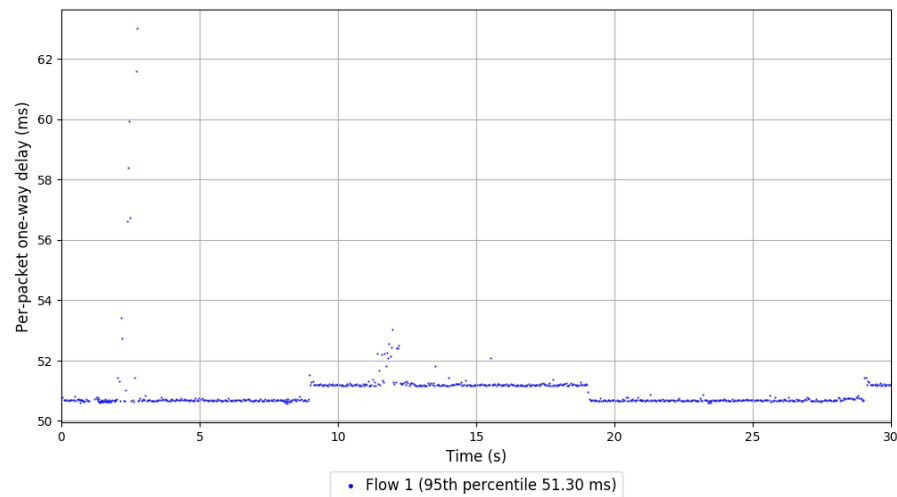
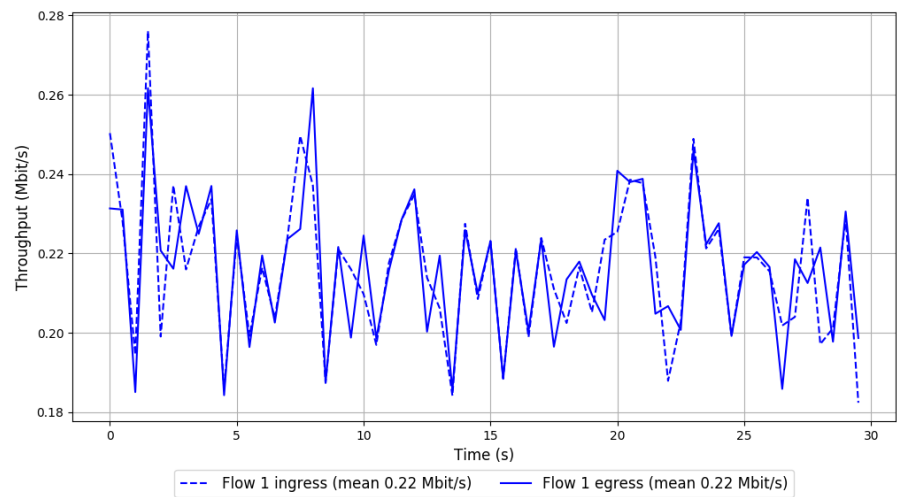
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.302 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-13 06:59:51

End at: 2018-02-13 07:00:21

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.542 ms

Loss rate: 0.00%

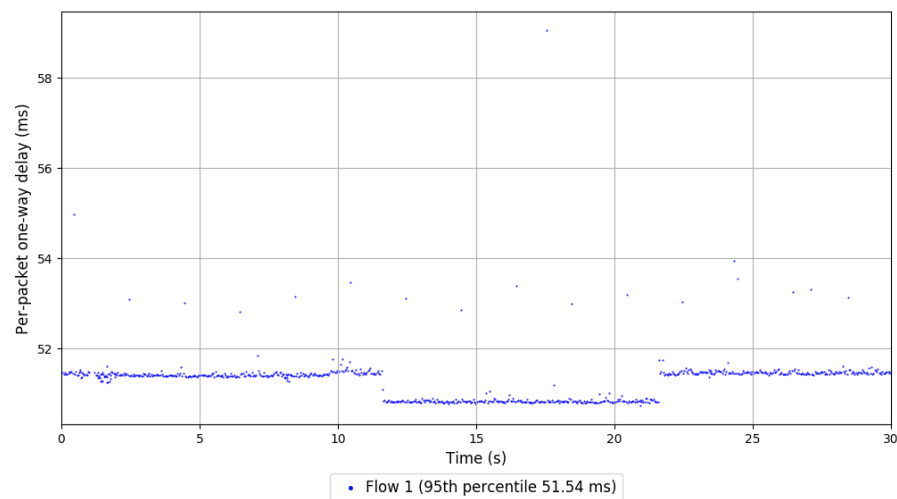
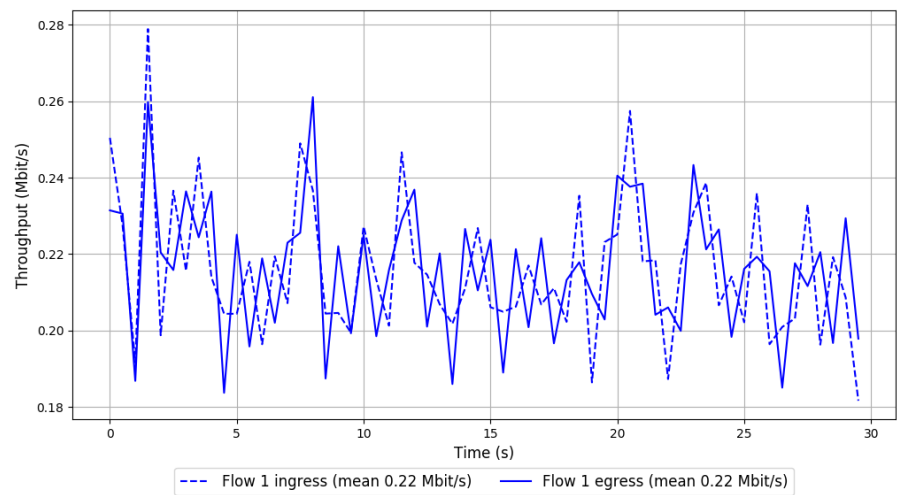
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.542 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-13 07:14:13

End at: 2018-02-13 07:14:43

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.746 ms

Loss rate: 0.00%

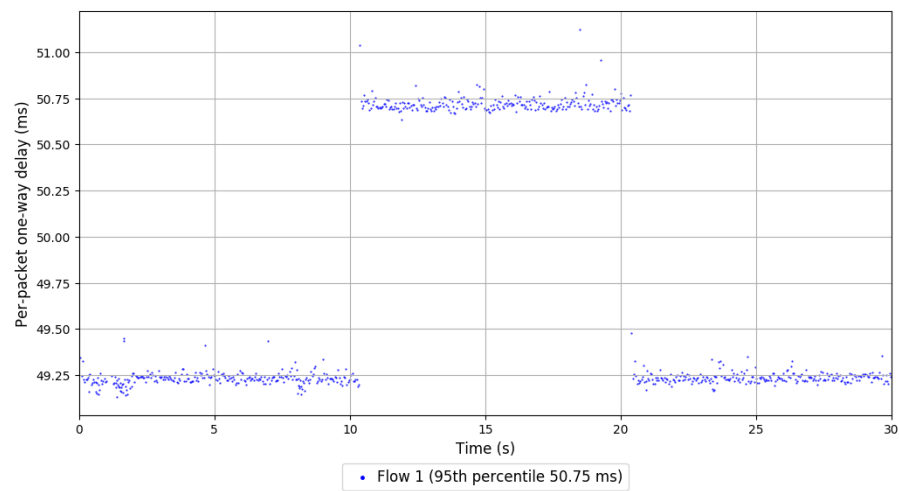
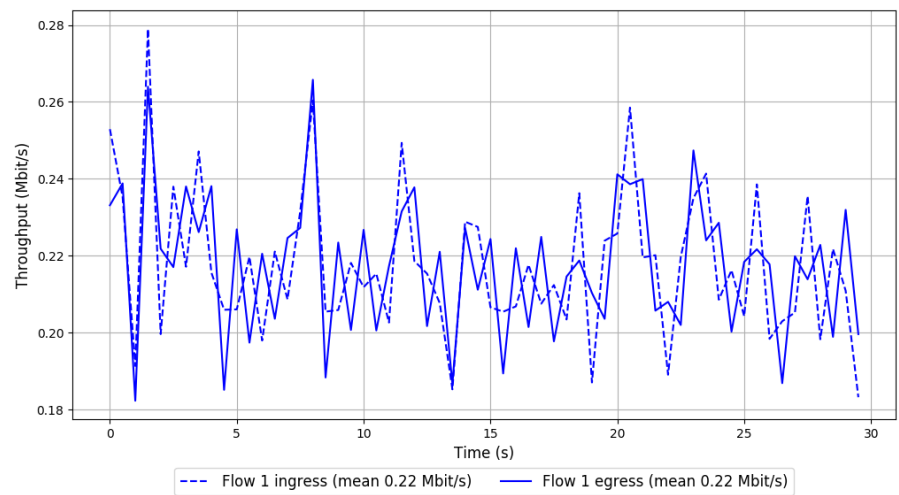
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.746 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-13 07:28:40

End at: 2018-02-13 07:29:10

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.803 ms

Loss rate: 0.00%

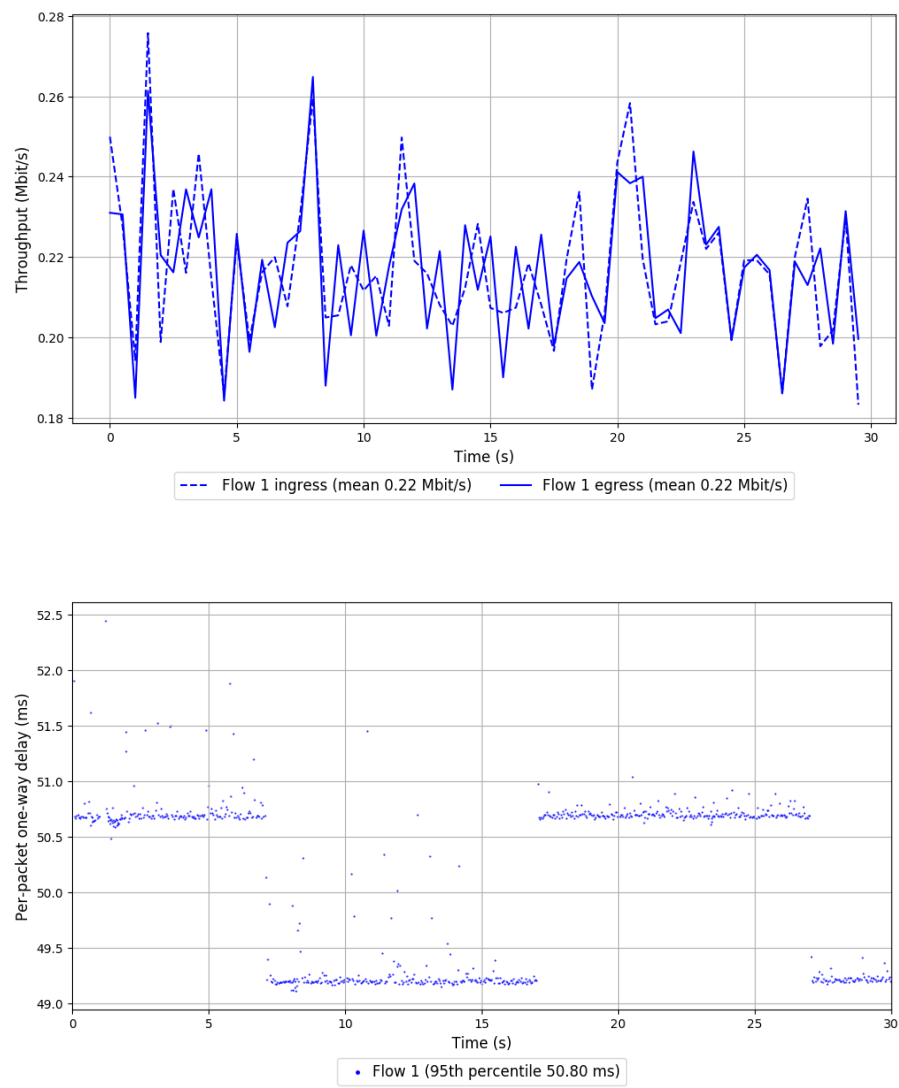
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.803 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-13 07:43:14

End at: 2018-02-13 07:43:44

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.124 ms

Loss rate: 0.00%

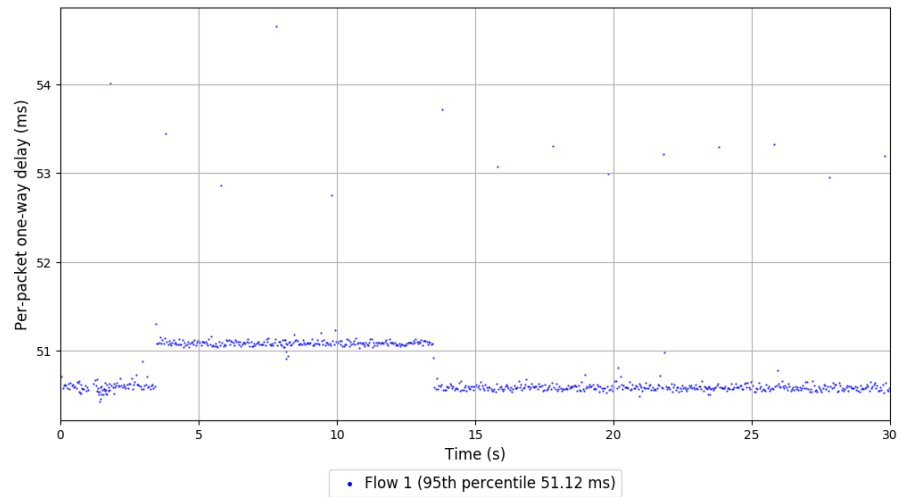
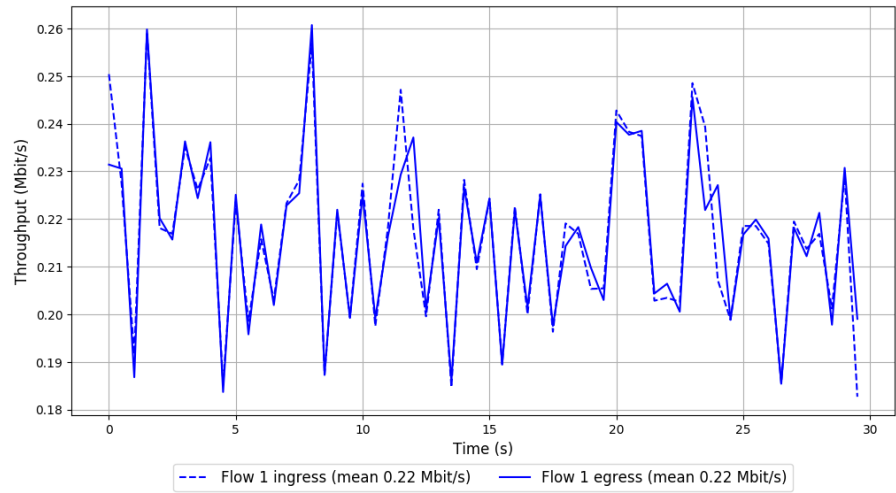
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.124 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-13 07:57:46

End at: 2018-02-13 07:58:16

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.104 ms

Loss rate: 0.00%

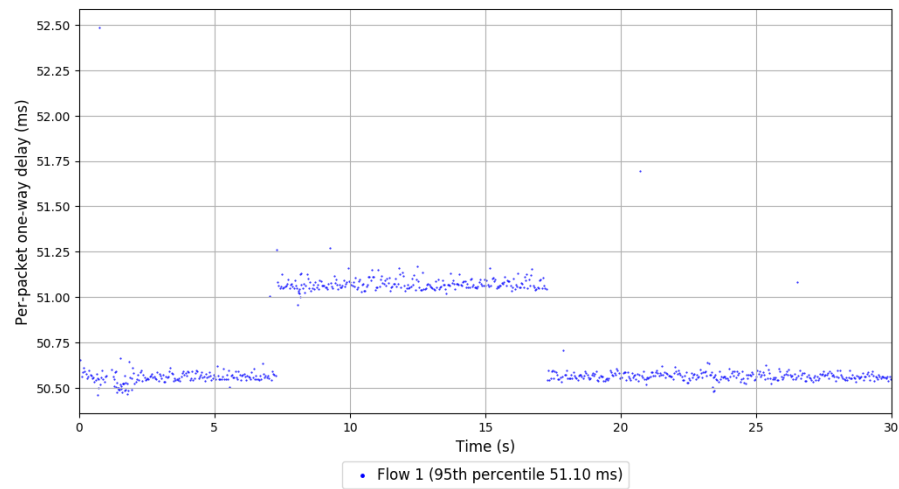
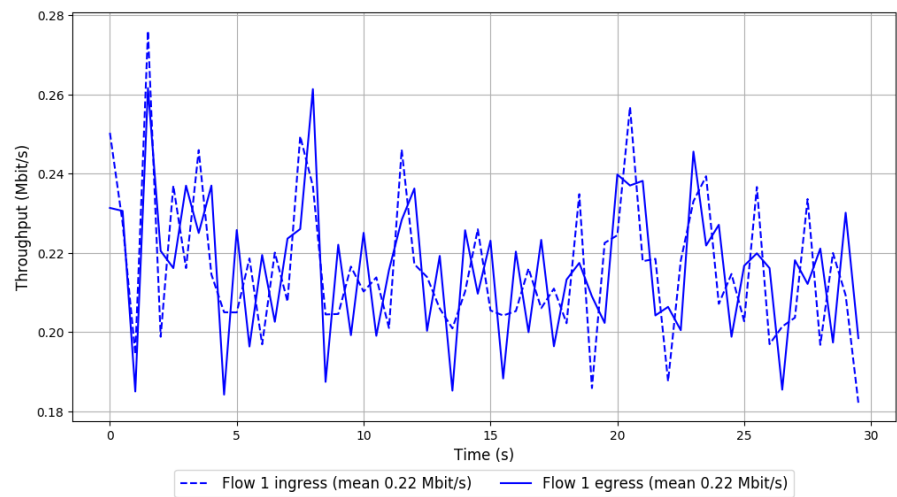
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.104 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

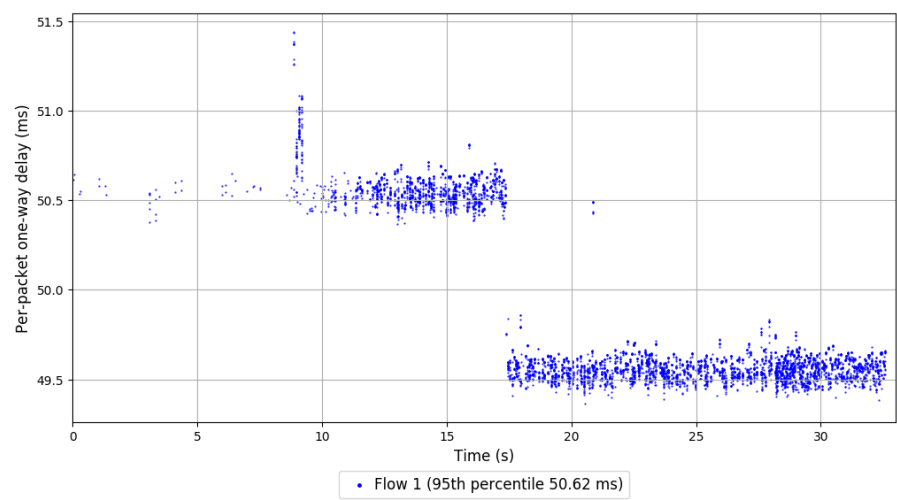
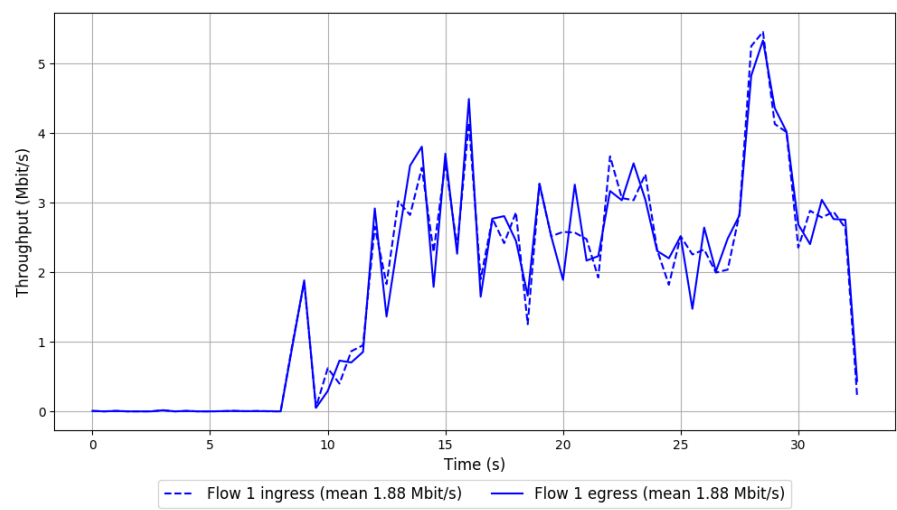


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-13 05:49:08
End at: 2018-02-13 05:49:38

# Below is generated by plot.py at 2018-02-13 10:02:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 50.624 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 50.624 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-13 06:03:58

End at: 2018-02-13 06:04:28

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 50.909 ms

Loss rate: 0.00%

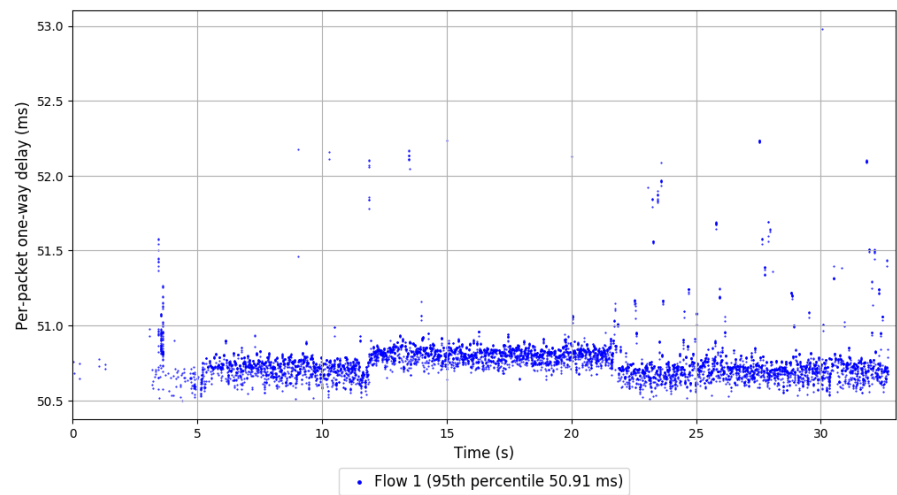
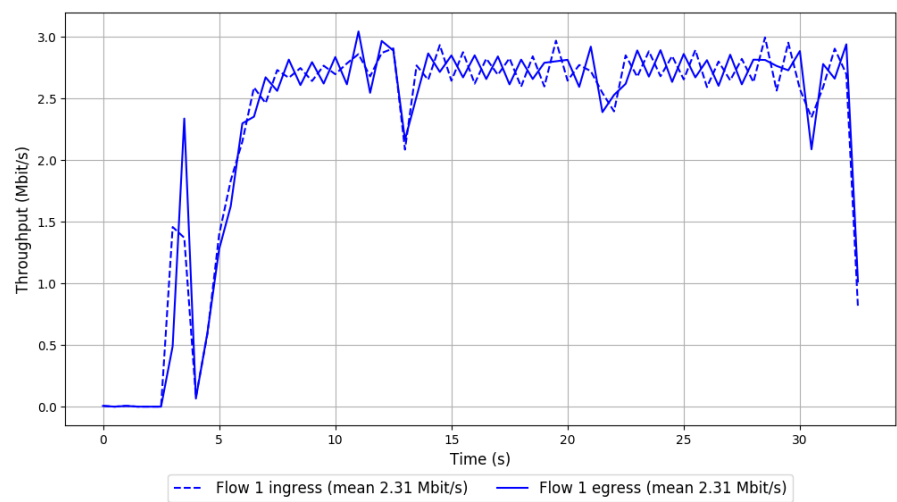
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 50.909 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-13 06:18:39

End at: 2018-02-13 06:19:09

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 50.615 ms

Loss rate: 0.00%

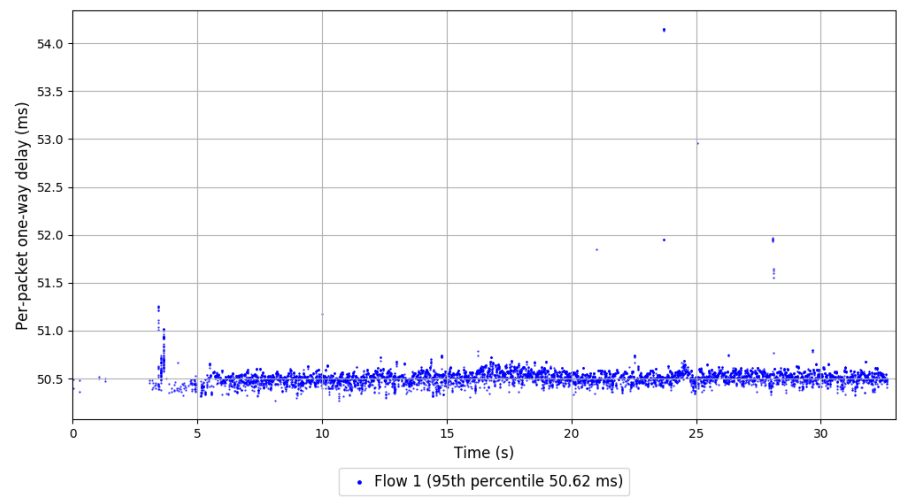
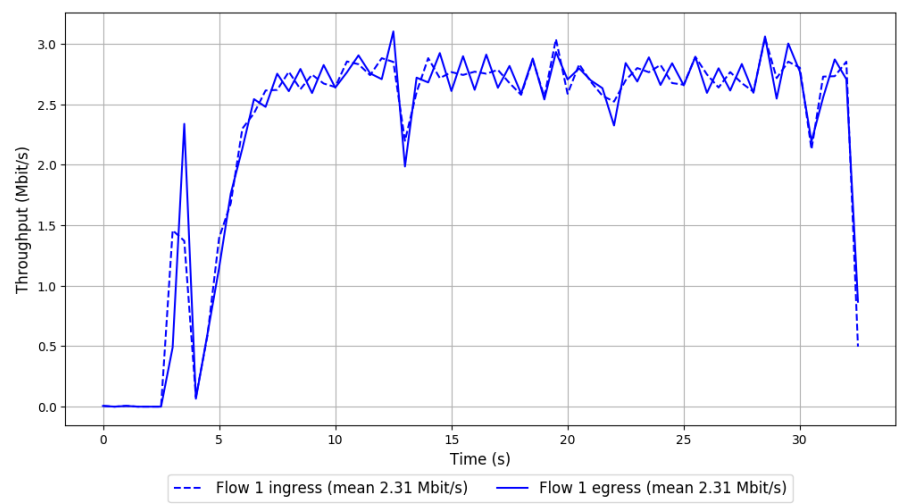
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 50.615 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-13 06:33:10

End at: 2018-02-13 06:33:40

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 51.187 ms

Loss rate: 0.00%

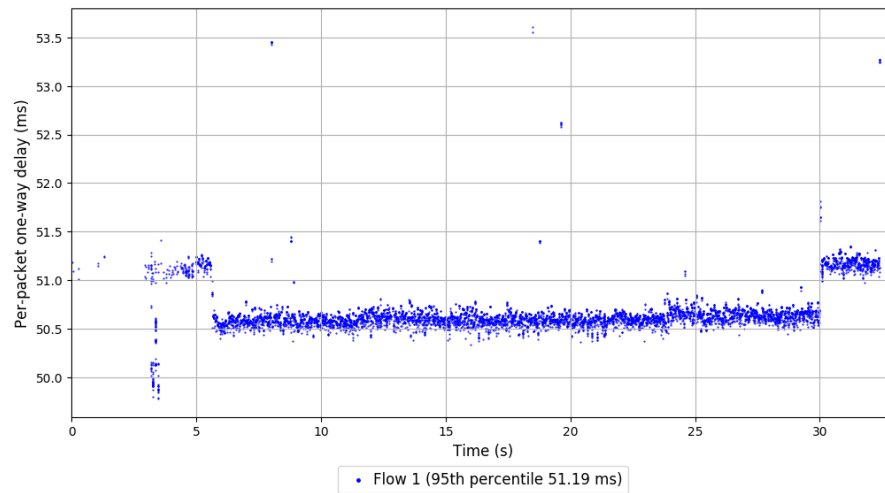
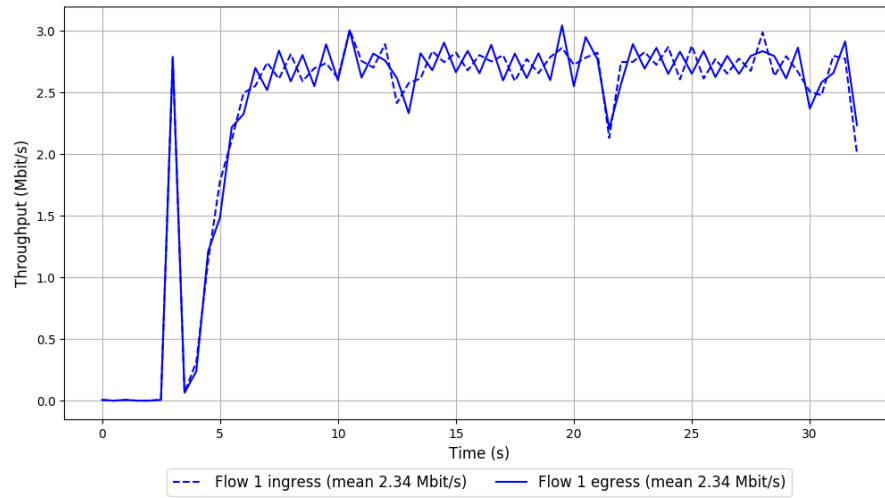
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 51.187 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-13 06:47:37

End at: 2018-02-13 06:48:07

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 50.807 ms

Loss rate: 0.00%

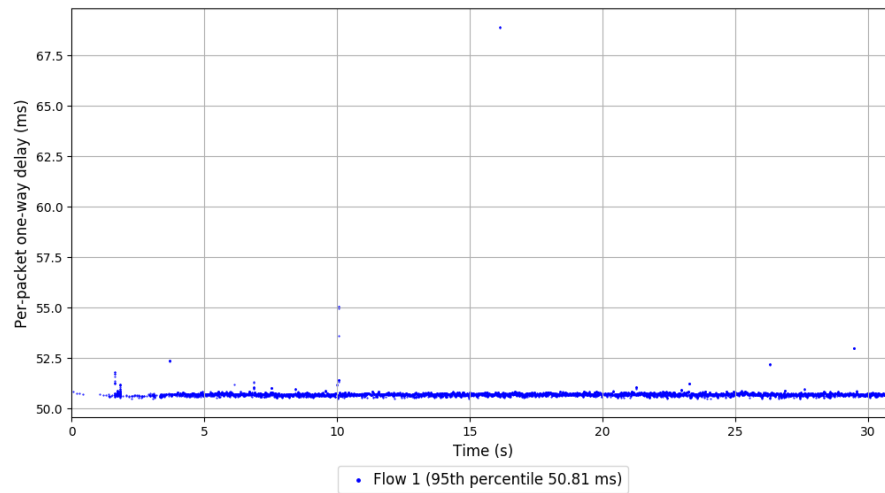
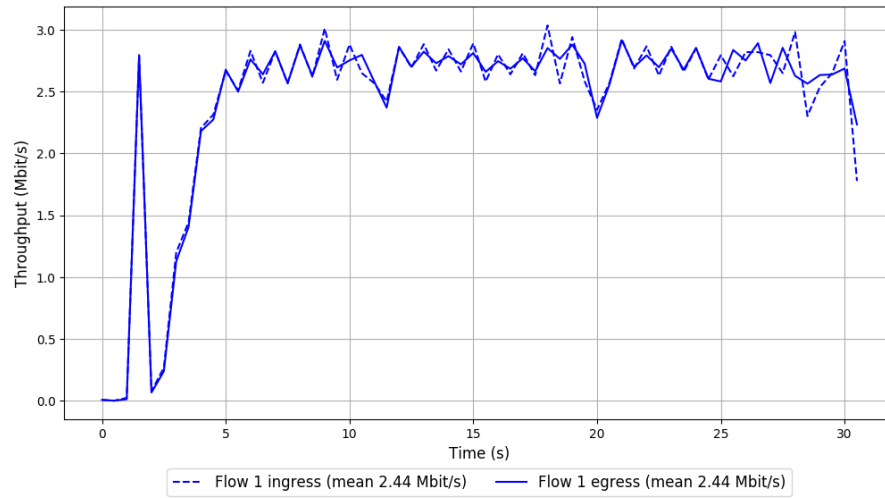
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 50.807 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-13 07:02:06

End at: 2018-02-13 07:02:36

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 51.531 ms

Loss rate: 0.00%

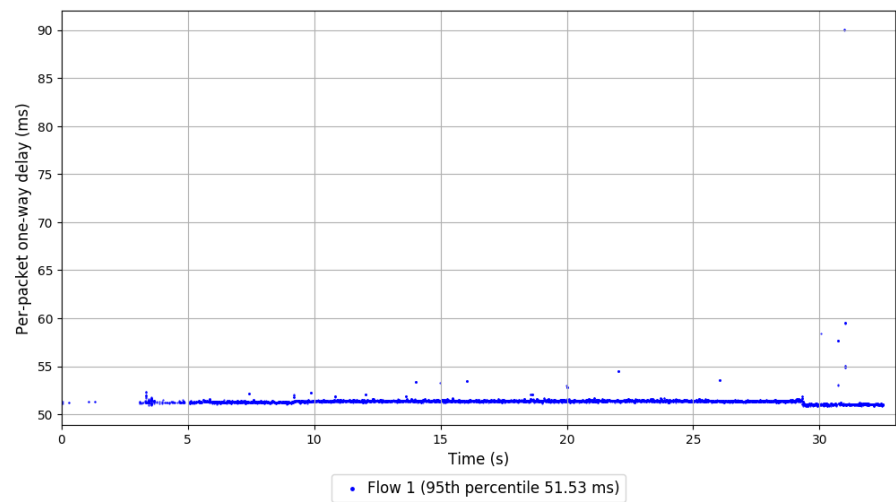
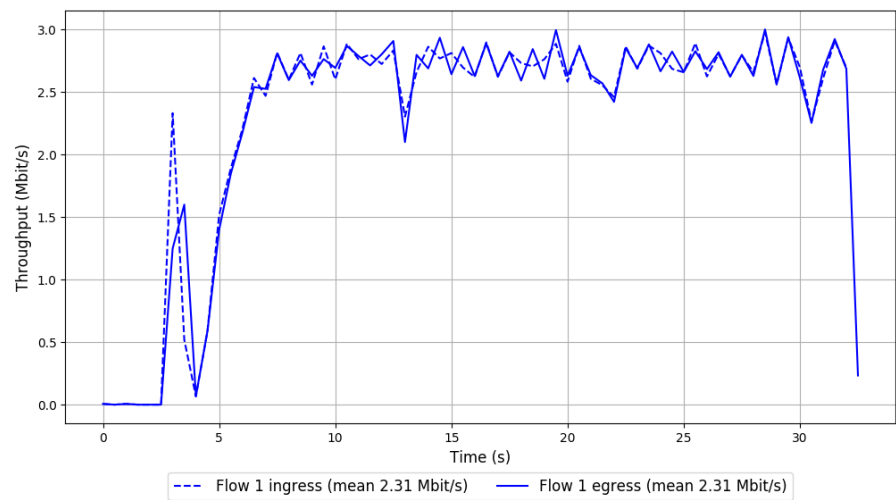
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 51.531 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-13 07:16:31

End at: 2018-02-13 07:17:01

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 0.00%

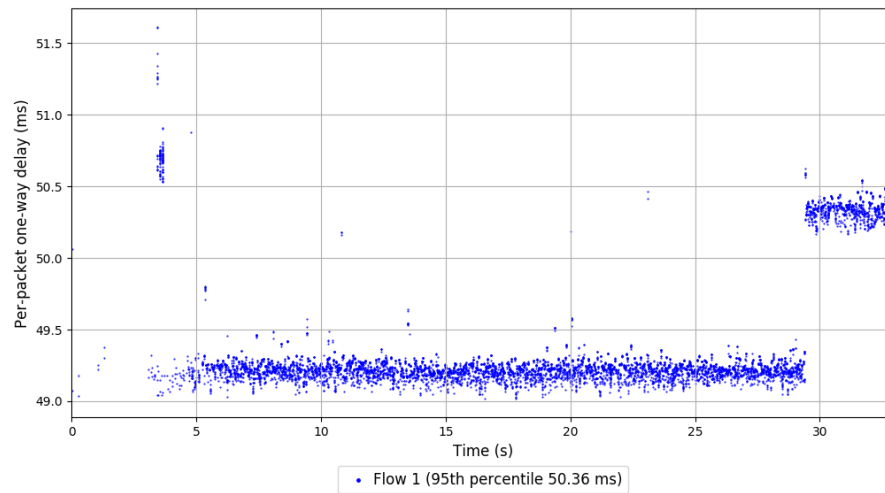
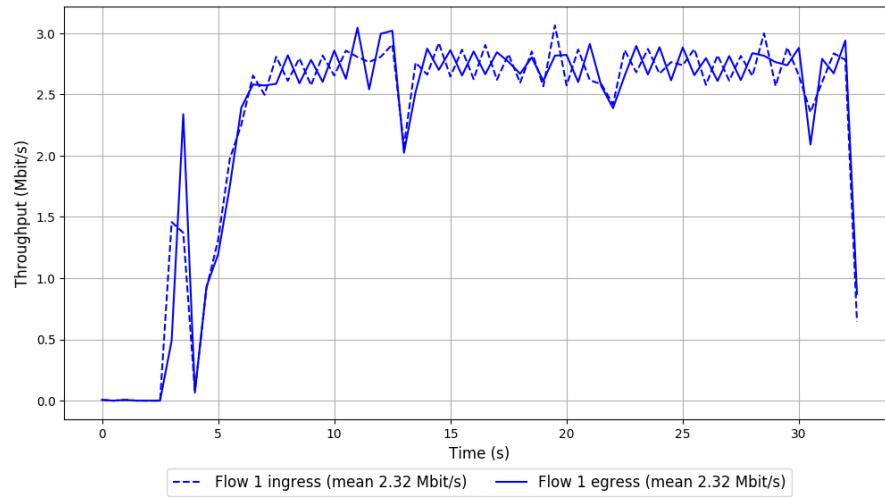
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-13 07:30:59

End at: 2018-02-13 07:31:29

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 51.216 ms

Loss rate: 0.00%

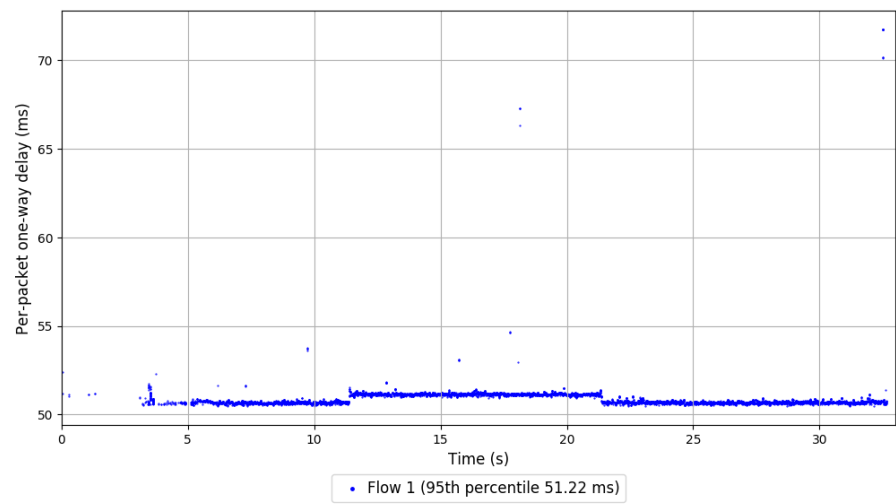
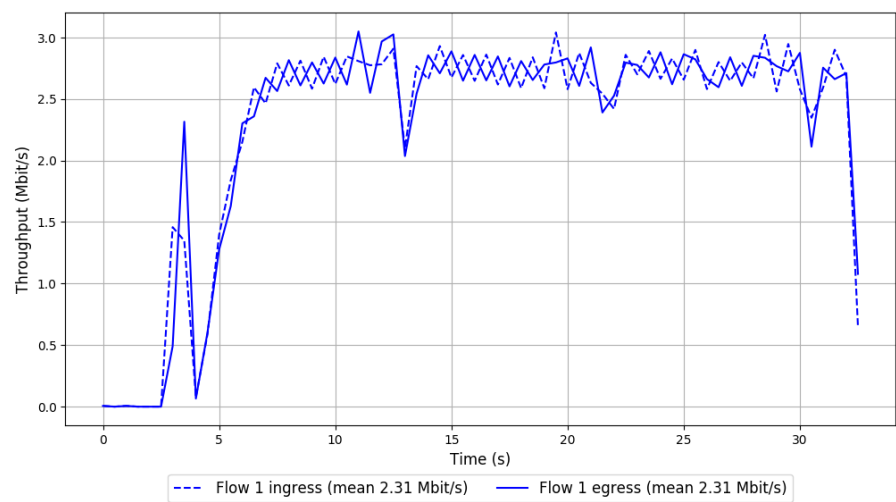
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 51.216 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-13 07:45:34

End at: 2018-02-13 07:46:04

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 51.013 ms

Loss rate: 0.00%

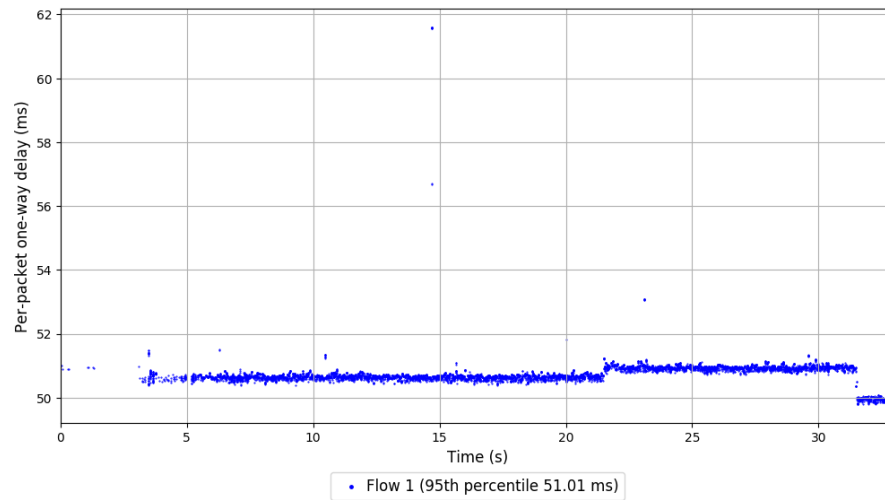
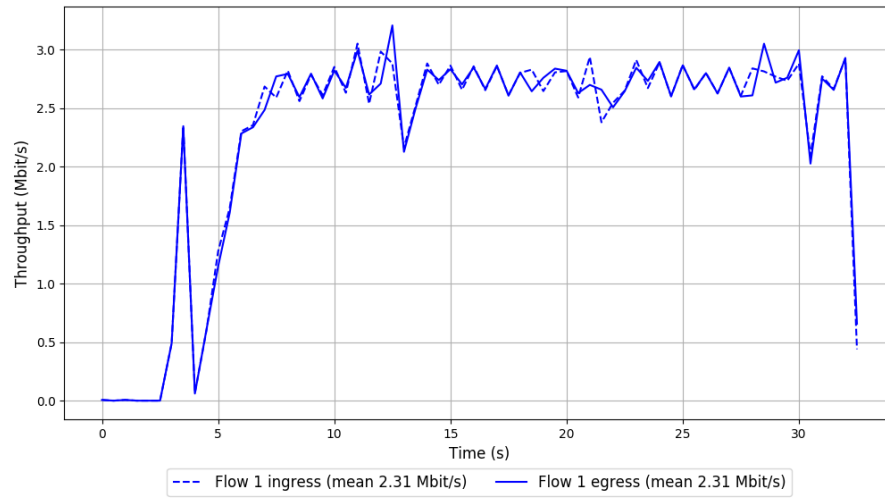
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 51.013 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-13 08:00:06

End at: 2018-02-13 08:00:36

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 49.970 ms

Loss rate: 0.00%

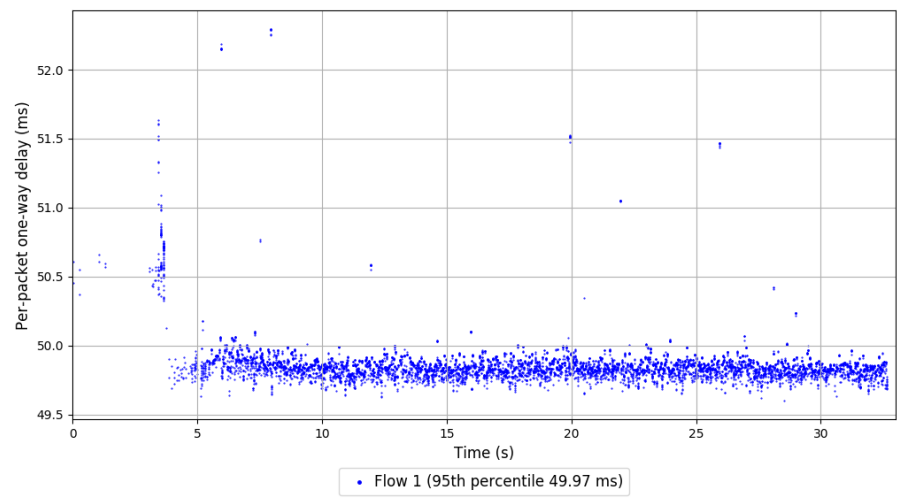
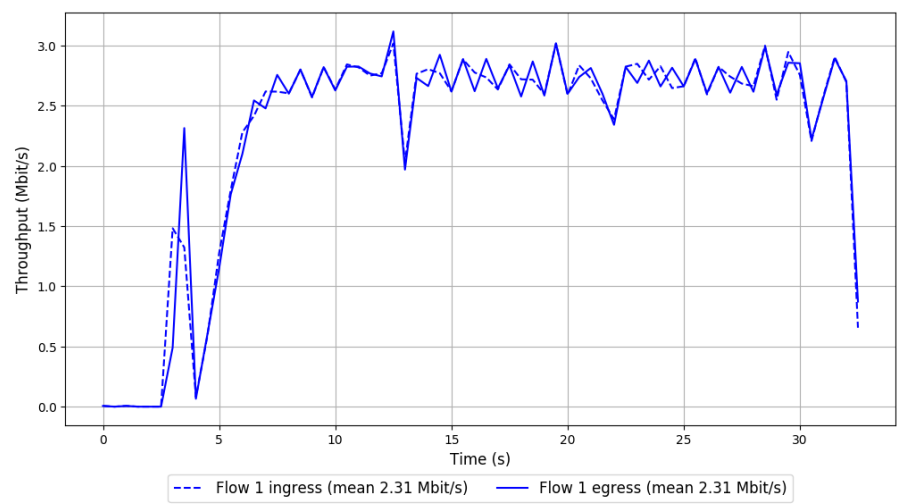
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 49.970 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-13 05:49:45

End at: 2018-02-13 05:50:15

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.565 ms

Loss rate: 0.42%

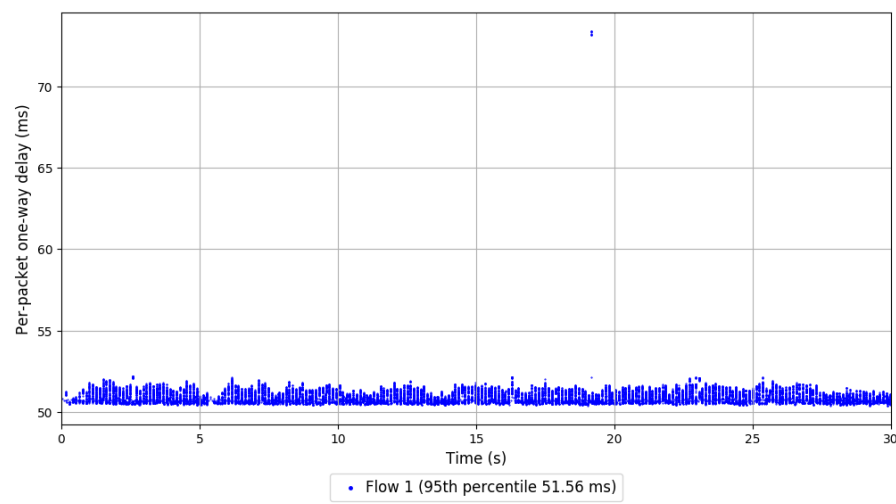
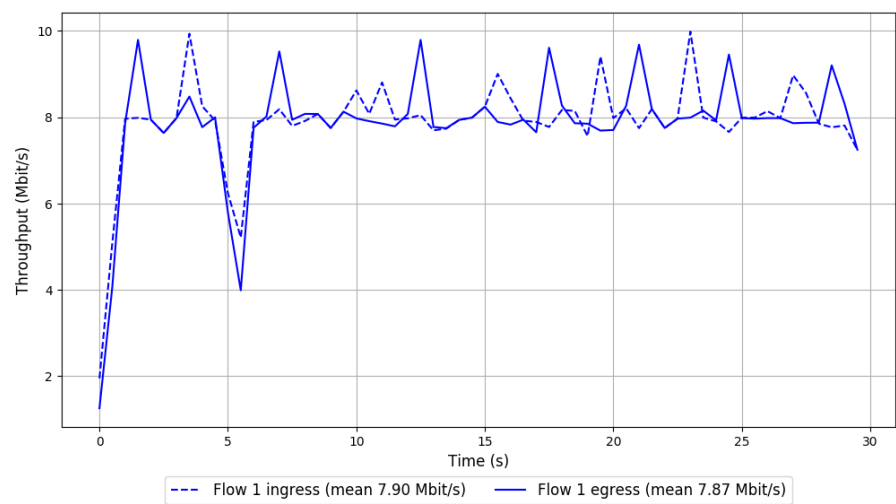
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.565 ms

Loss rate: 0.42%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-13 06:04:35

End at: 2018-02-13 06:05:05

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.911 ms

Loss rate: 0.00%

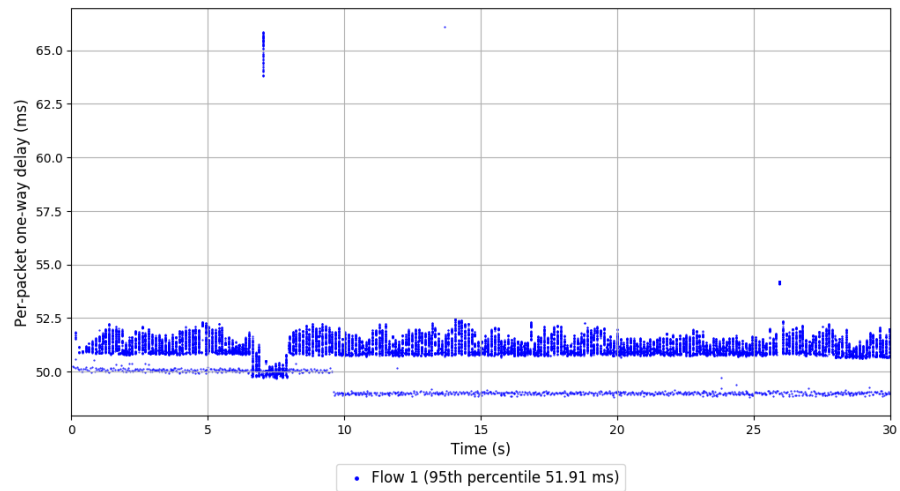
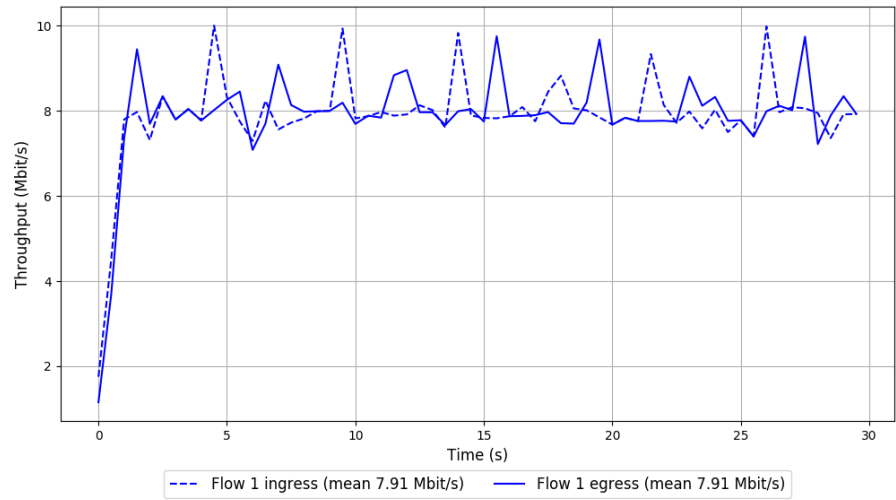
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.911 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-13 06:19:17

End at: 2018-02-13 06:19:47

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.869 ms

Loss rate: 0.24%

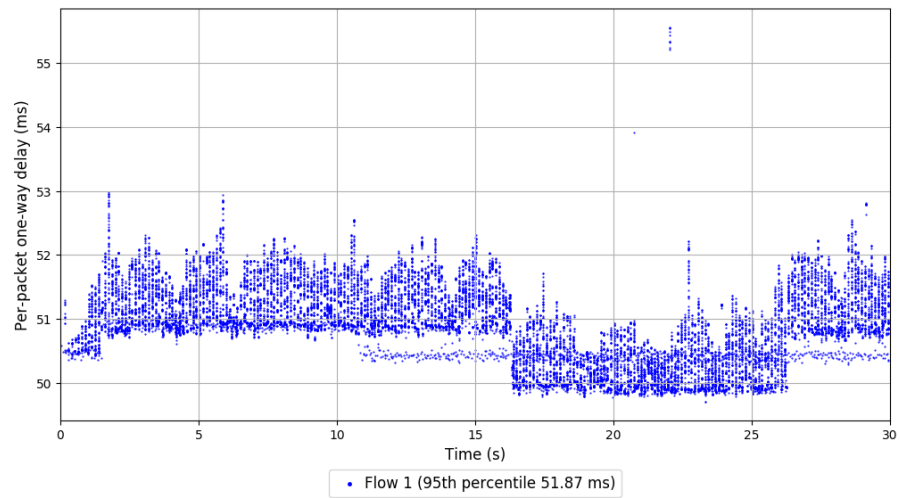
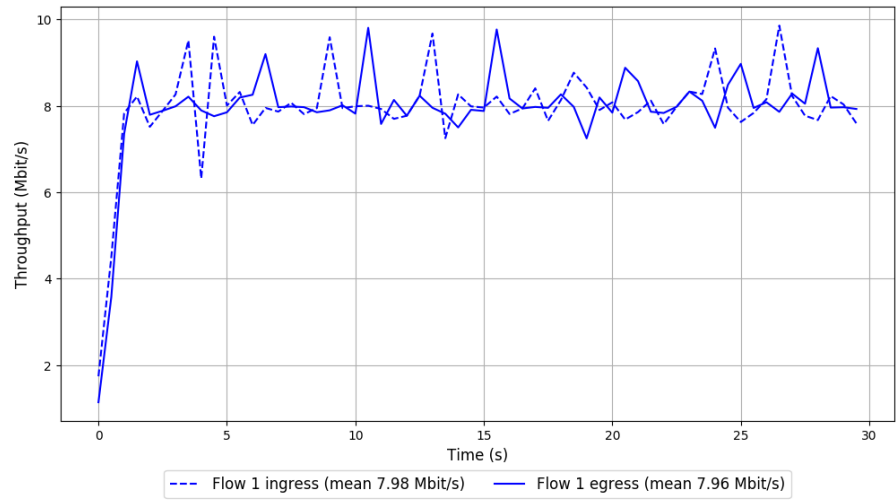
-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.869 ms

Loss rate: 0.24%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-13 06:33:46

End at: 2018-02-13 06:34:17

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 51.810 ms

Loss rate: 1.27%

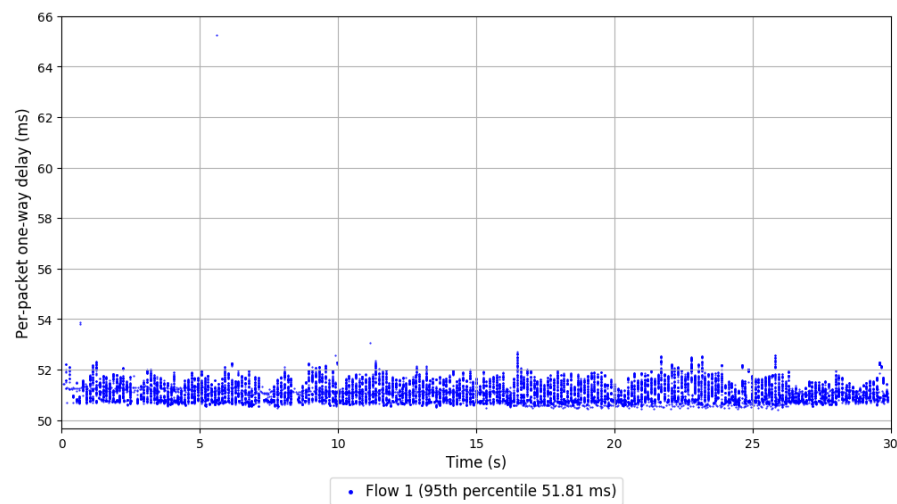
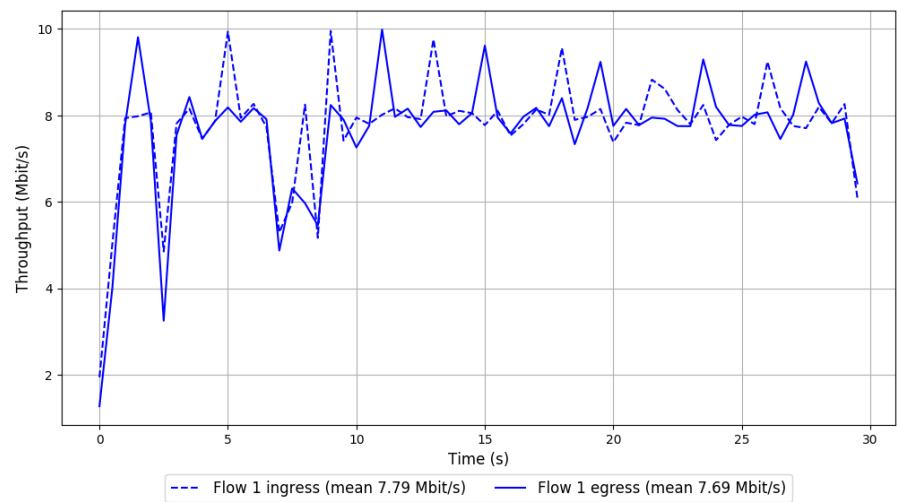
-- Flow 1:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 51.810 ms

Loss rate: 1.27%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-13 06:48:14

End at: 2018-02-13 06:48:44

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.817 ms

Loss rate: 0.58%

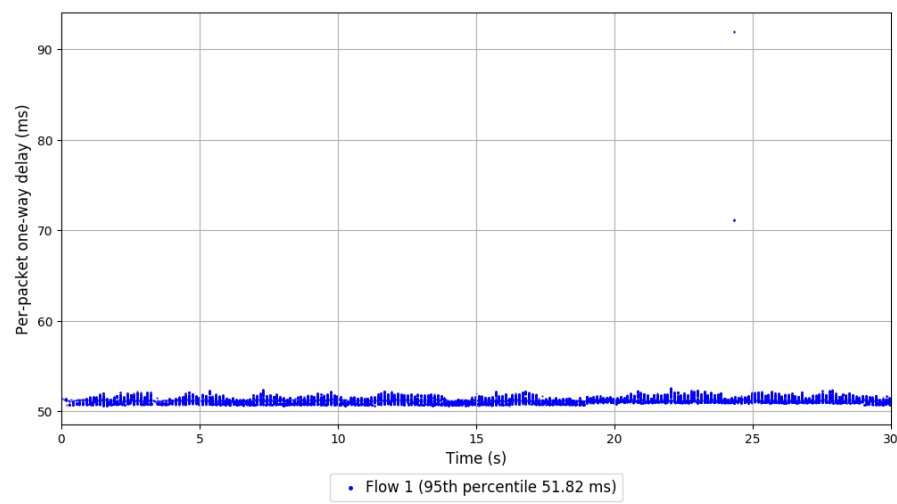
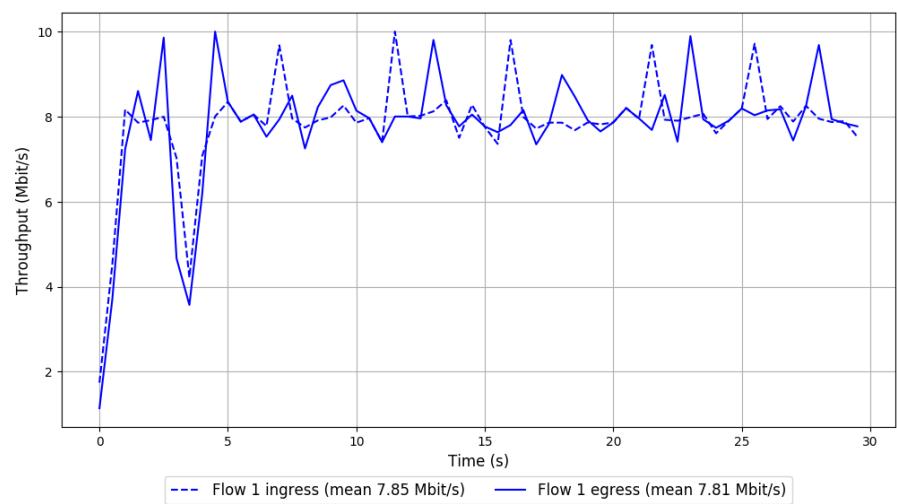
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.817 ms

Loss rate: 0.58%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-13 07:02:43

End at: 2018-02-13 07:03:13

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.940 ms

Loss rate: 0.64%

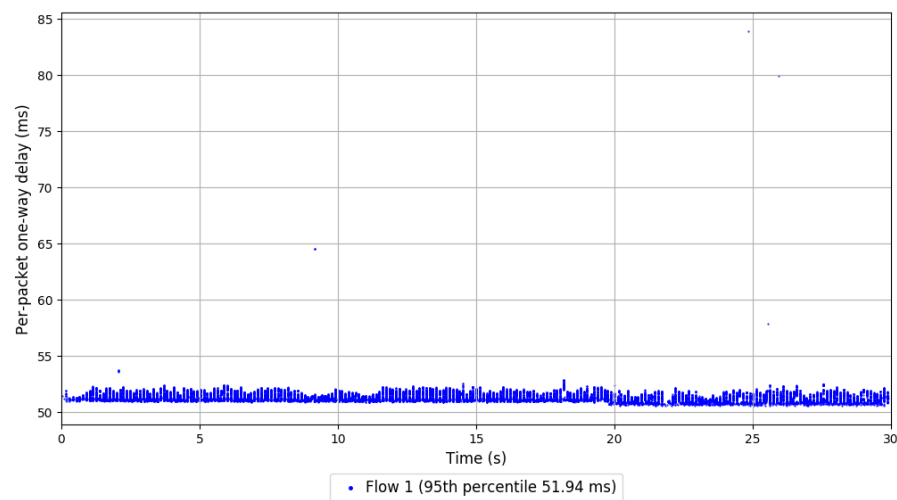
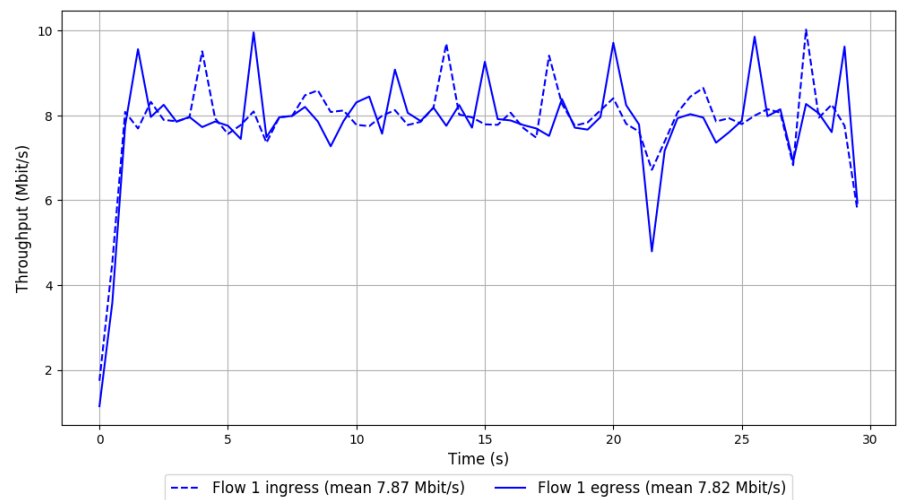
-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.940 ms

Loss rate: 0.64%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-13 07:17:08

End at: 2018-02-13 07:17:38

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 51.705 ms

Loss rate: 0.86%

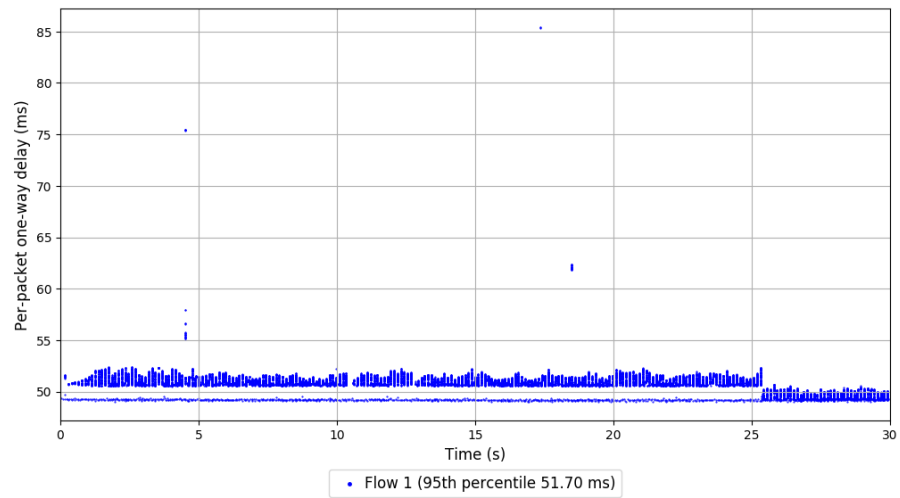
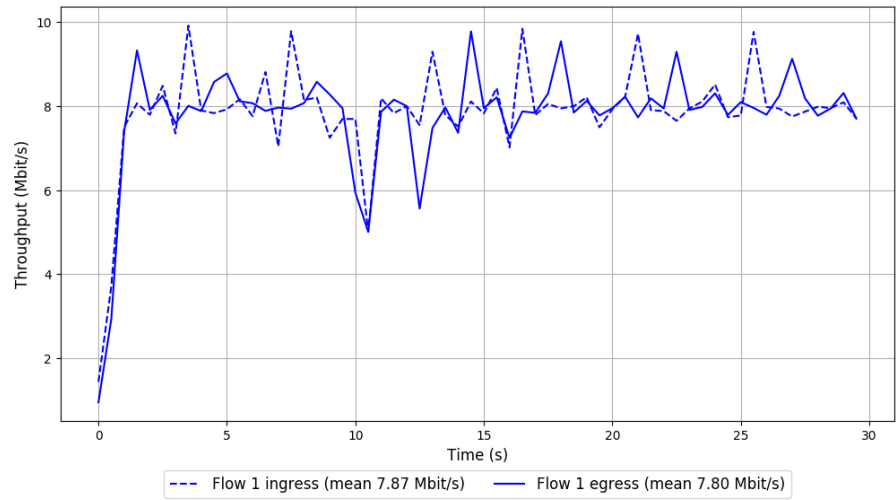
-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 51.705 ms

Loss rate: 0.86%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-13 07:31:35

End at: 2018-02-13 07:32:06

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 0.16%

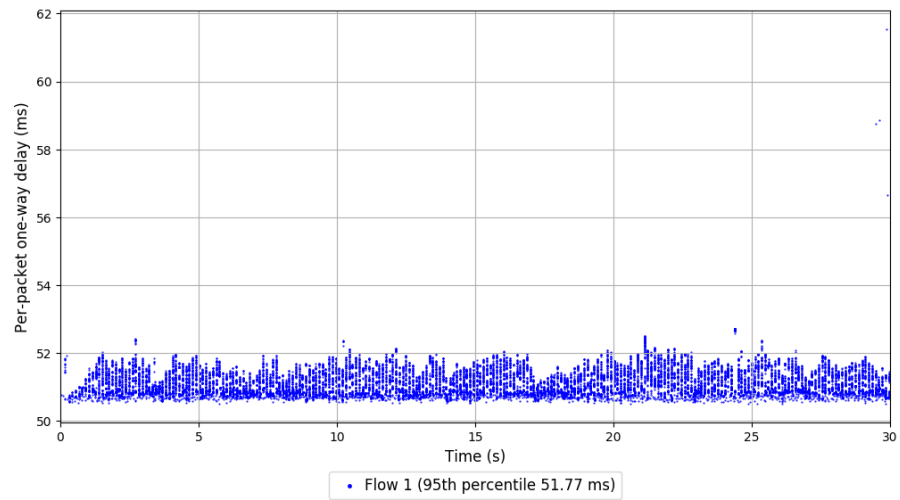
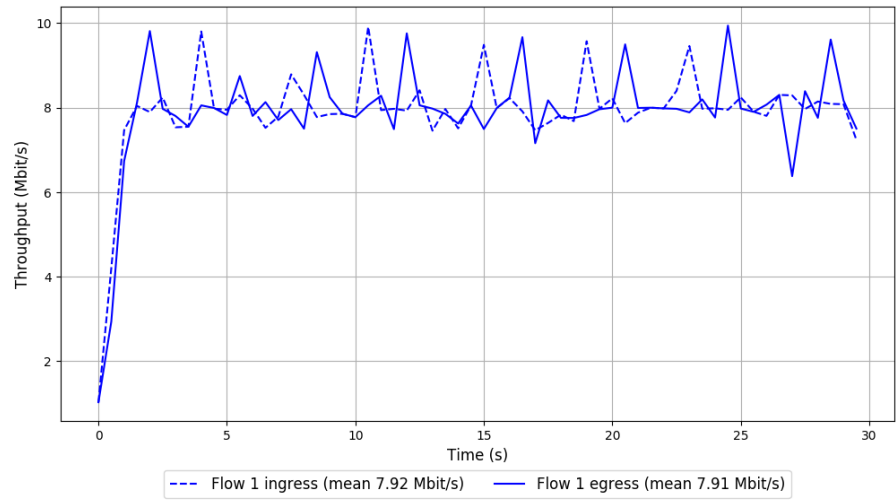
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 0.16%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-13 07:46:11

End at: 2018-02-13 07:46:41

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 51.322 ms

Loss rate: 0.60%

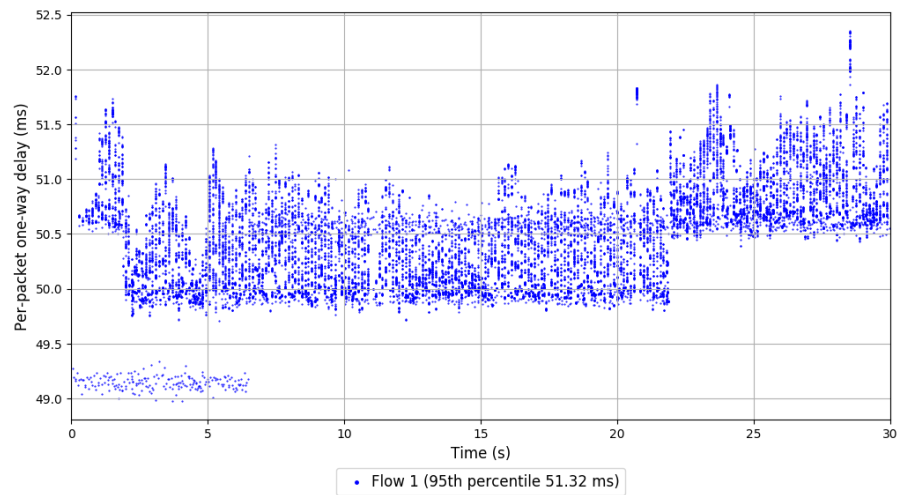
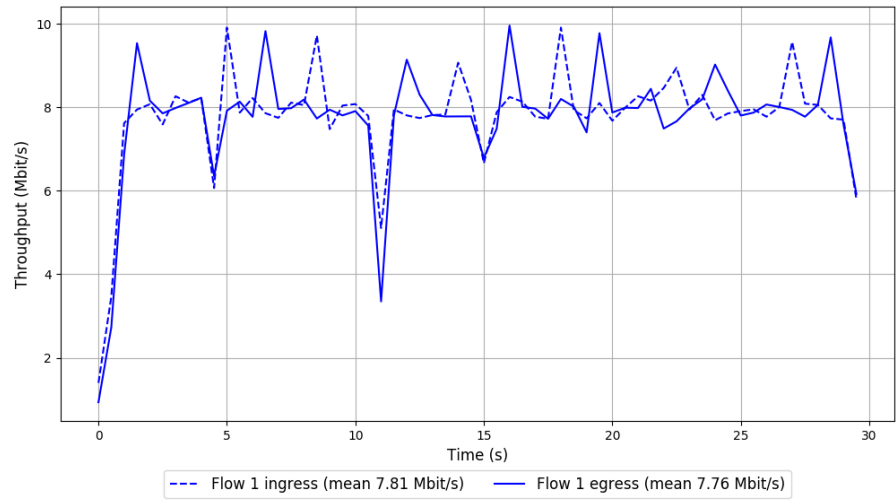
-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 51.322 ms

Loss rate: 0.60%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-13 08:00:43

End at: 2018-02-13 08:01:13

Below is generated by plot.py at 2018-02-13 10:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.279 ms

Loss rate: 0.43%

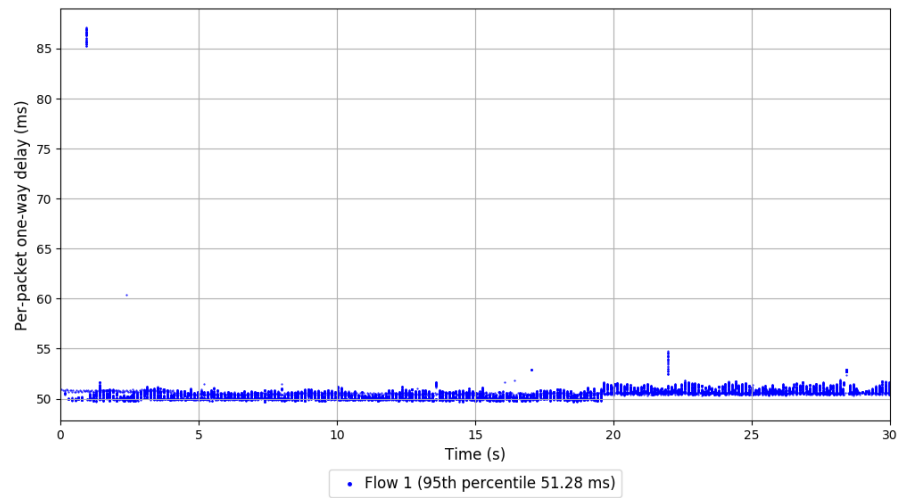
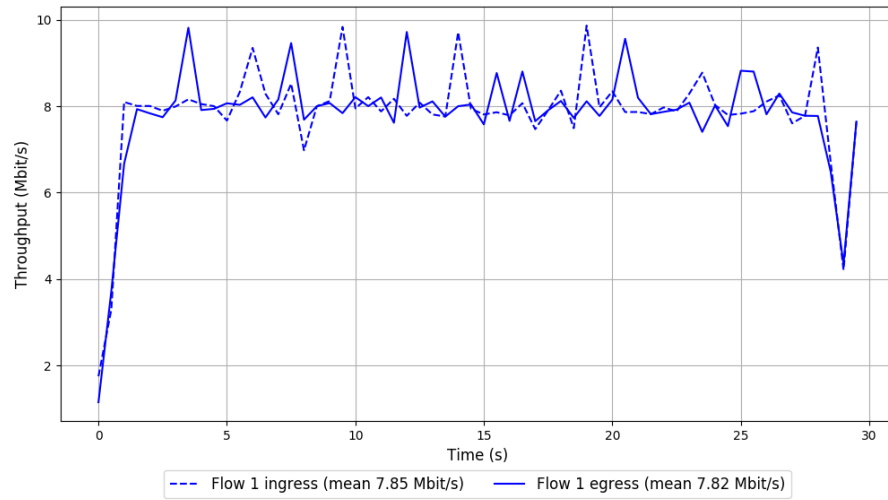
-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.279 ms

Loss rate: 0.43%

Run 10: Report of Sprout — Data Link

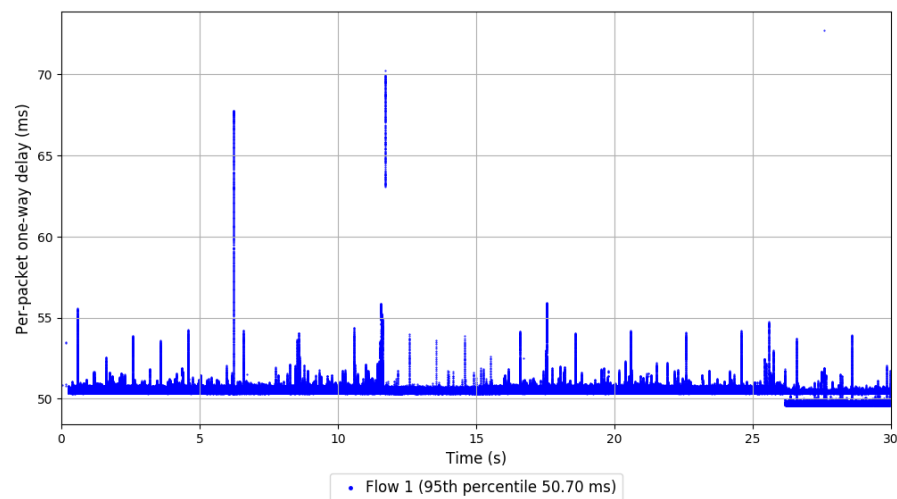
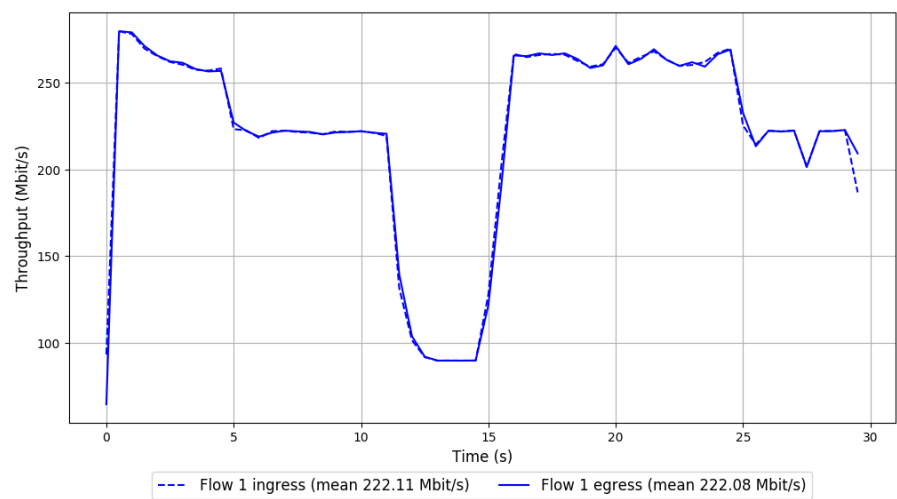


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-13 05:40:51
End at: 2018-02-13 05:41:21

# Below is generated by plot.py at 2018-02-13 10:06:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.08 Mbit/s
95th percentile per-packet one-way delay: 50.697 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 222.08 Mbit/s
95th percentile per-packet one-way delay: 50.697 ms
Loss rate: 0.01%
```


Run 1: Report of TaoVA-100x — Data Link



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-13 05:55:46

End at: 2018-02-13 05:56:16

Below is generated by plot.py at 2018-02-13 10:06:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.70 Mbit/s

95th percentile per-packet one-way delay: 50.762 ms

Loss rate: 0.00%

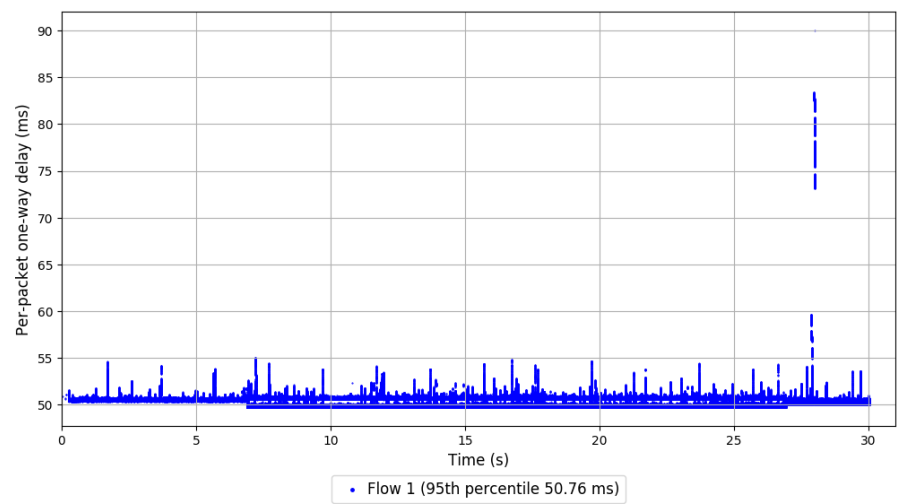
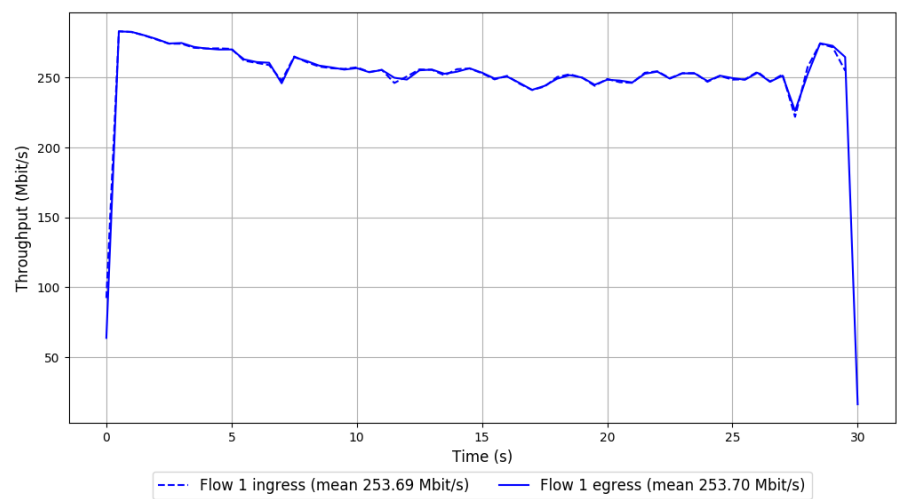
-- Flow 1:

Average throughput: 253.70 Mbit/s

95th percentile per-packet one-way delay: 50.762 ms

Loss rate: 0.00%

Run 2: Report of TaoVA-100x — Data Link

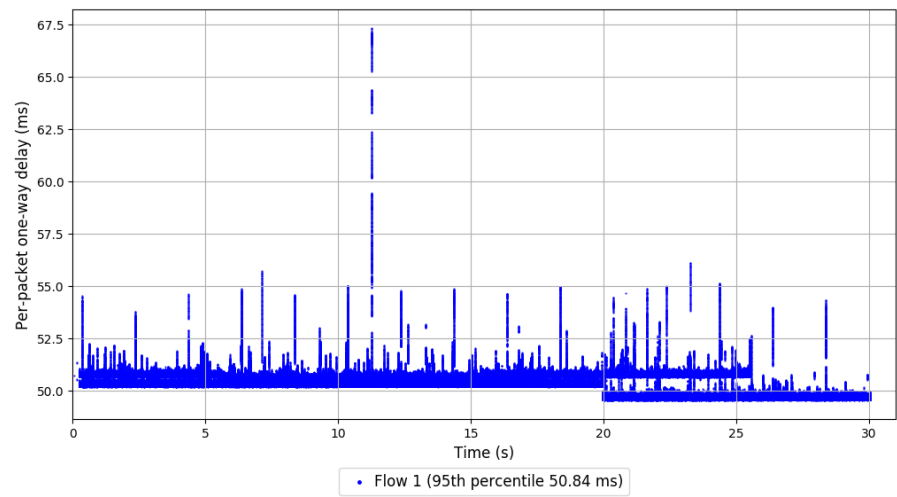
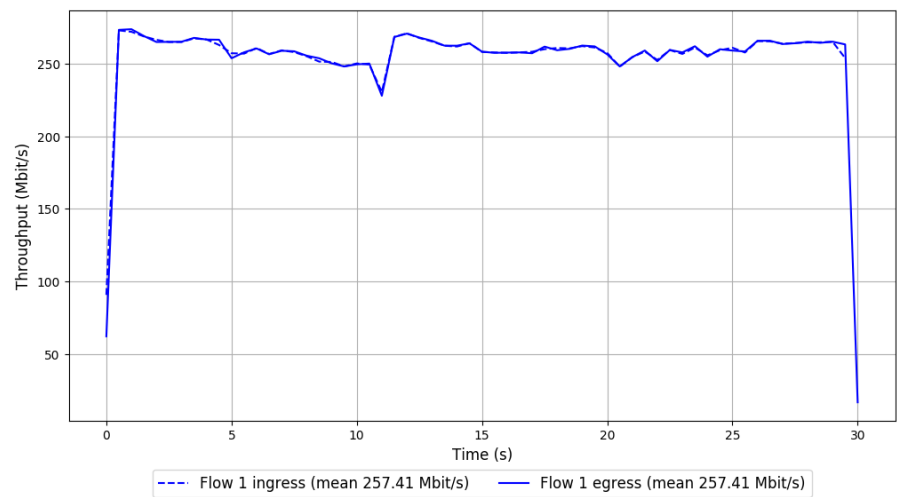


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-13 06:10:27
End at: 2018-02-13 06:10:57

# Below is generated by plot.py at 2018-02-13 10:07:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.41 Mbit/s
95th percentile per-packet one-way delay: 50.840 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 257.41 Mbit/s
95th percentile per-packet one-way delay: 50.840 ms
Loss rate: 0.00%
```

Run 3: Report of TaoVA-100x — Data Link



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-13 06:25:14

End at: 2018-02-13 06:25:44

Below is generated by plot.py at 2018-02-13 10:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.70 Mbit/s

95th percentile per-packet one-way delay: 50.872 ms

Loss rate: 0.01%

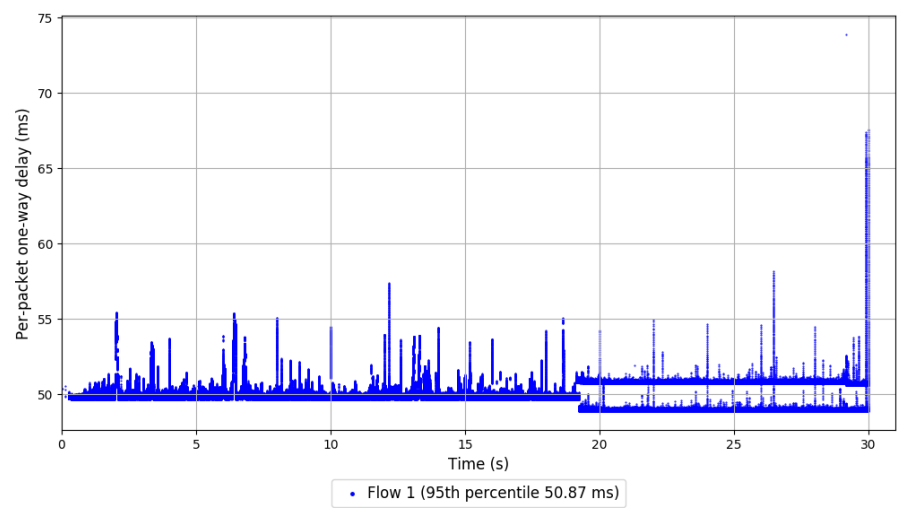
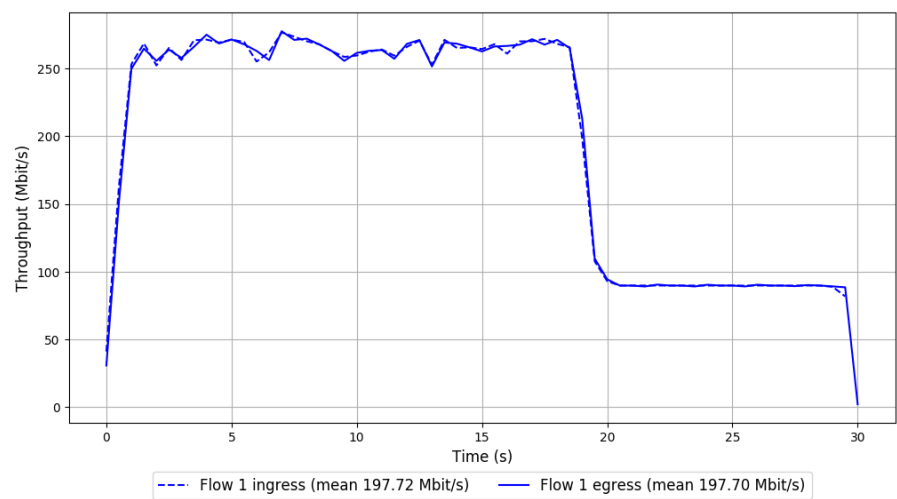
-- Flow 1:

Average throughput: 197.70 Mbit/s

95th percentile per-packet one-way delay: 50.872 ms

Loss rate: 0.01%

Run 4: Report of TaoVA-100x — Data Link



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-13 06:39:38

End at: 2018-02-13 06:40:08

Below is generated by plot.py at 2018-02-13 10:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.60 Mbit/s

95th percentile per-packet one-way delay: 51.109 ms

Loss rate: 0.00%

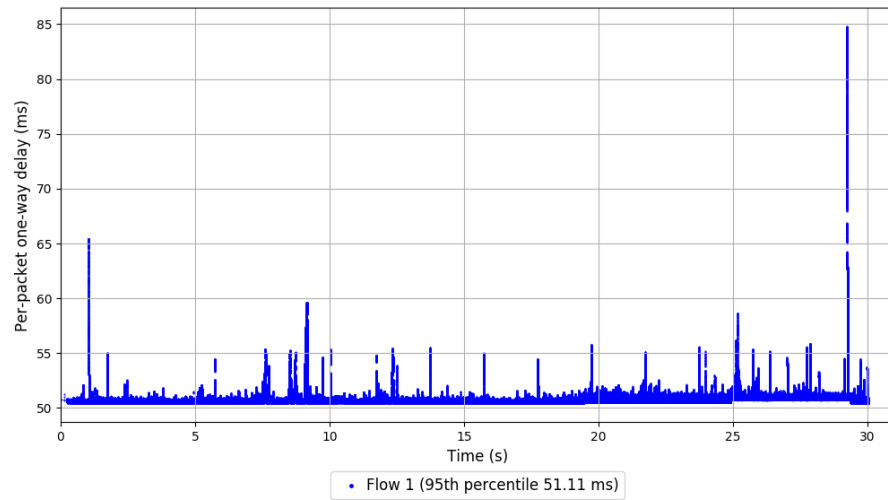
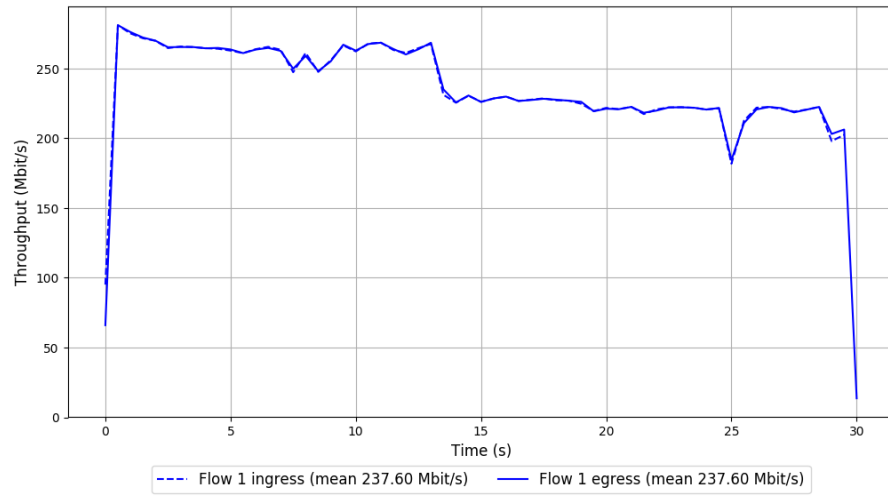
-- Flow 1:

Average throughput: 237.60 Mbit/s

95th percentile per-packet one-way delay: 51.109 ms

Loss rate: 0.00%

Run 5: Report of TaoVA-100x — Data Link



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-13 06:54:05

End at: 2018-02-13 06:54:35

Below is generated by plot.py at 2018-02-13 10:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.91 Mbit/s

95th percentile per-packet one-way delay: 51.606 ms

Loss rate: 0.00%

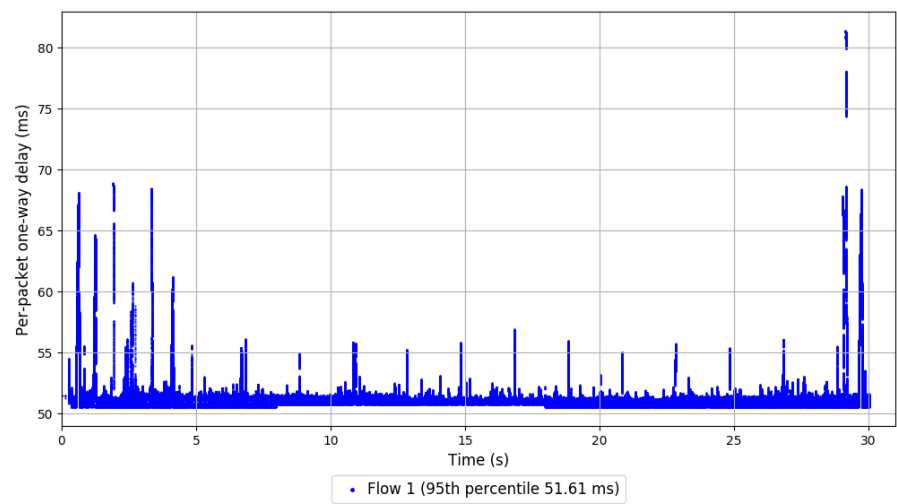
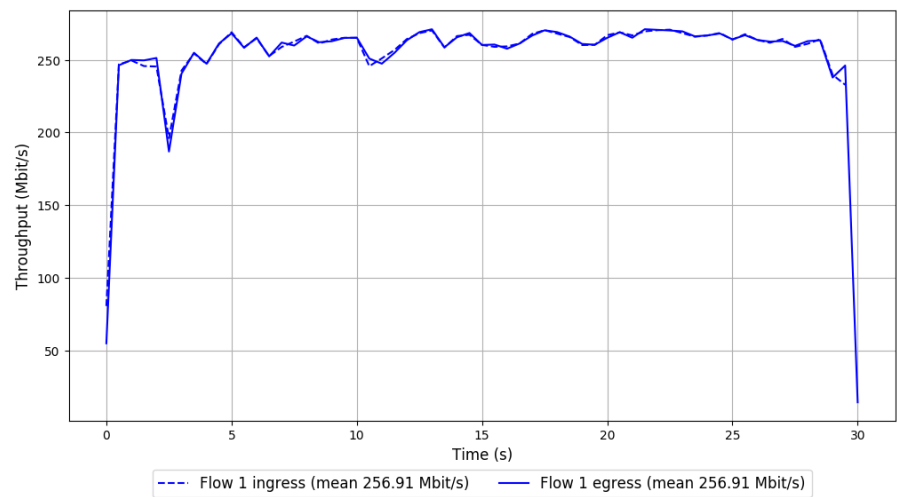
-- Flow 1:

Average throughput: 256.91 Mbit/s

95th percentile per-packet one-way delay: 51.606 ms

Loss rate: 0.00%

Run 6: Report of TaoVA-100x — Data Link

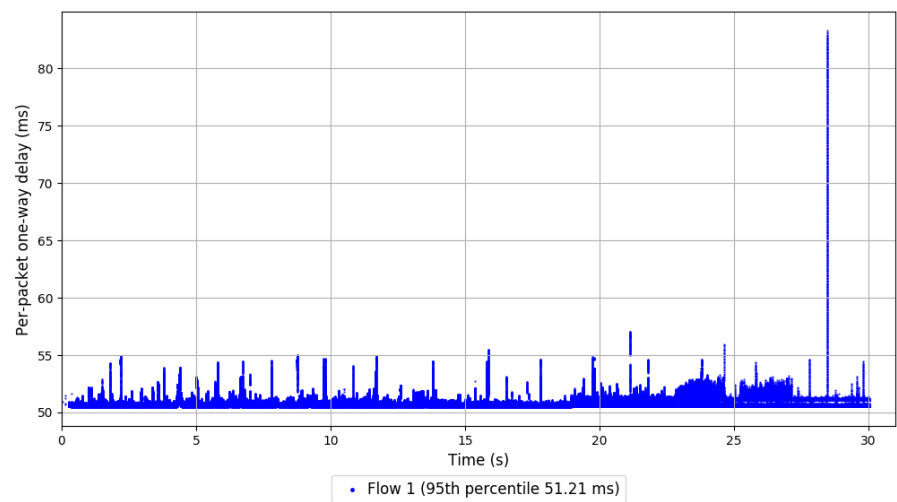
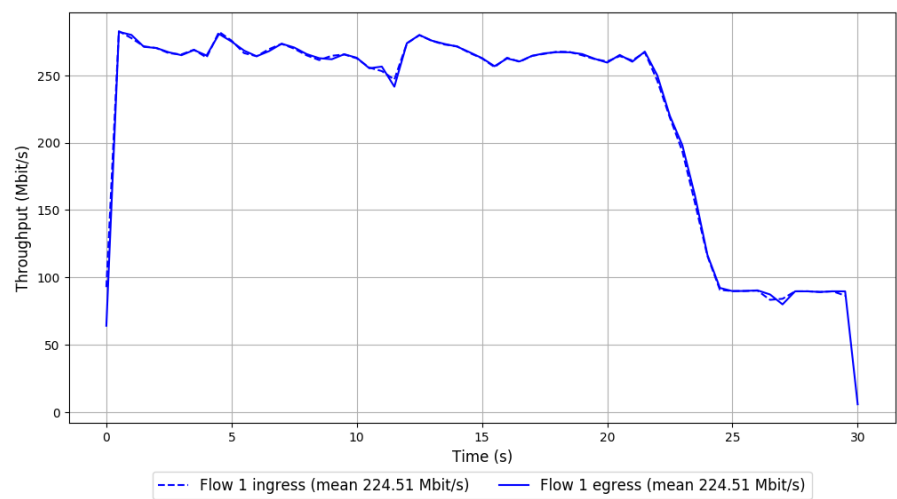


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-13 07:08:34
End at: 2018-02-13 07:09:04

# Below is generated by plot.py at 2018-02-13 10:08:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.51 Mbit/s
95th percentile per-packet one-way delay: 51.209 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 224.51 Mbit/s
95th percentile per-packet one-way delay: 51.209 ms
Loss rate: 0.00%
```

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-13 07:22:56

End at: 2018-02-13 07:23:26

Below is generated by plot.py at 2018-02-13 10:10:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.62 Mbit/s

95th percentile per-packet one-way delay: 51.077 ms

Loss rate: 0.00%

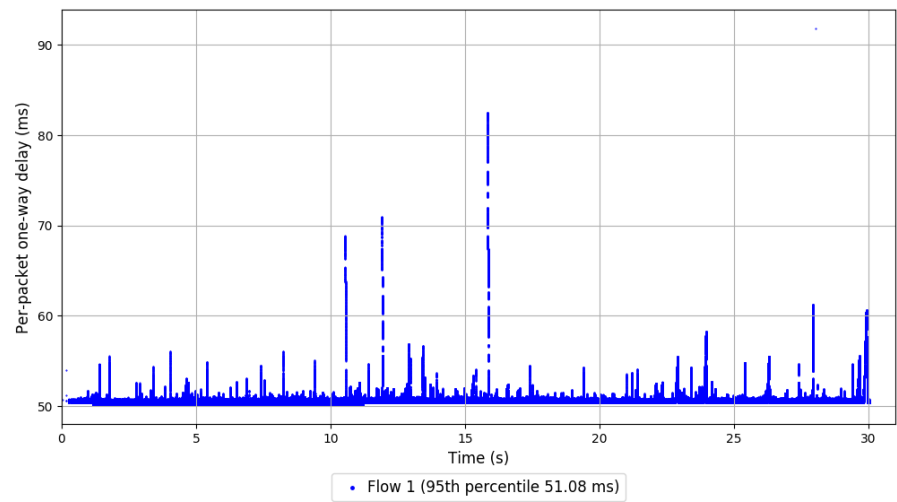
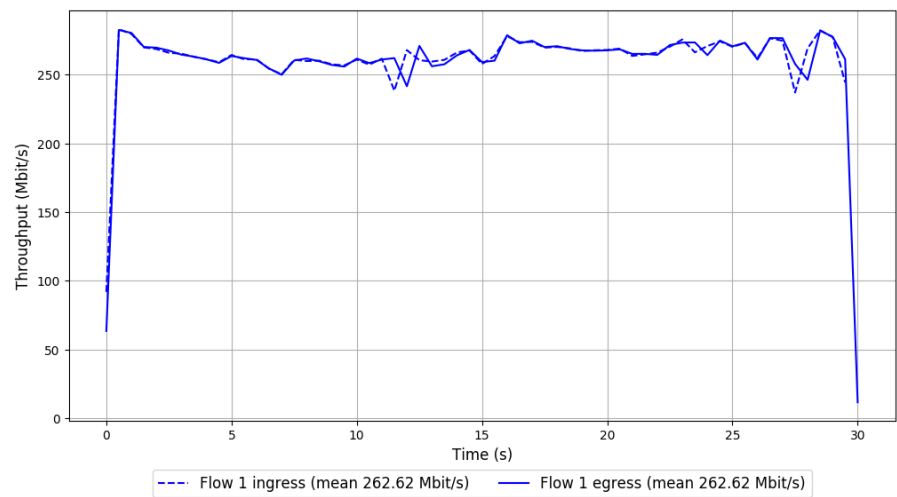
-- Flow 1:

Average throughput: 262.62 Mbit/s

95th percentile per-packet one-way delay: 51.077 ms

Loss rate: 0.00%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-13 07:37:24

End at: 2018-02-13 07:37:54

Below is generated by plot.py at 2018-02-13 10:13:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.62 Mbit/s

95th percentile per-packet one-way delay: 51.397 ms

Loss rate: 0.00%

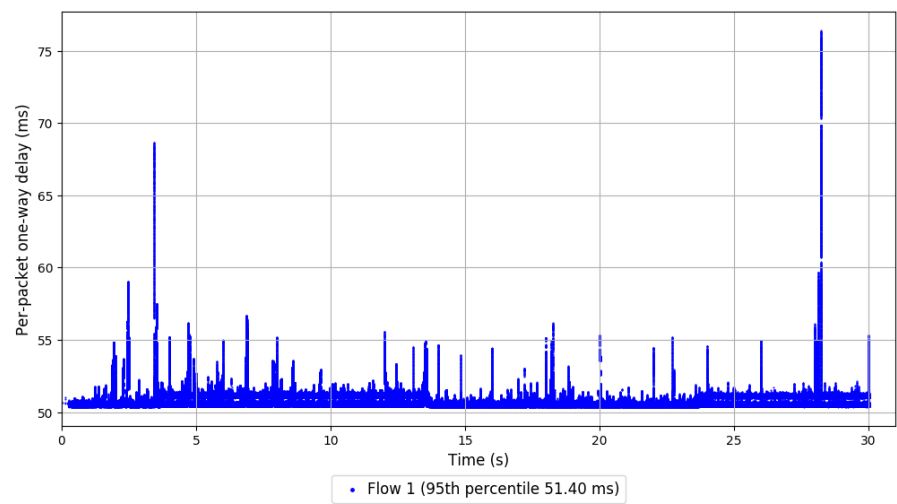
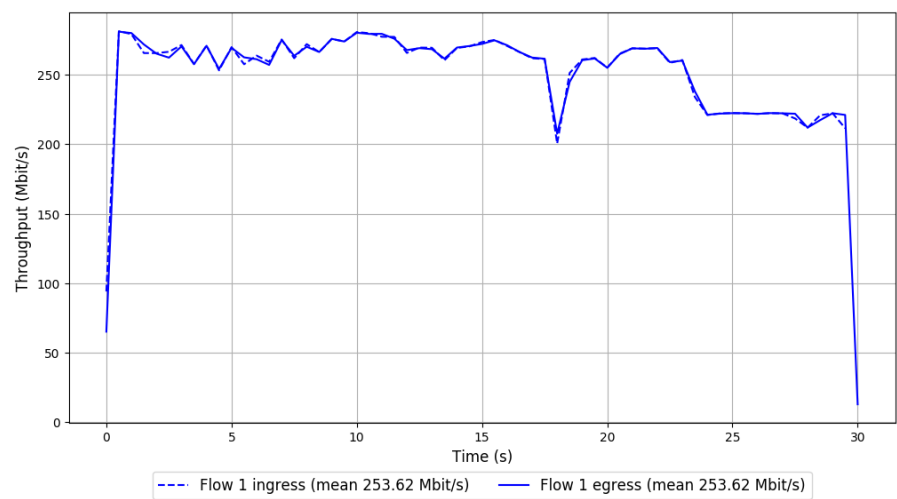
-- Flow 1:

Average throughput: 253.62 Mbit/s

95th percentile per-packet one-way delay: 51.397 ms

Loss rate: 0.00%

Run 9: Report of TaoVA-100x — Data Link

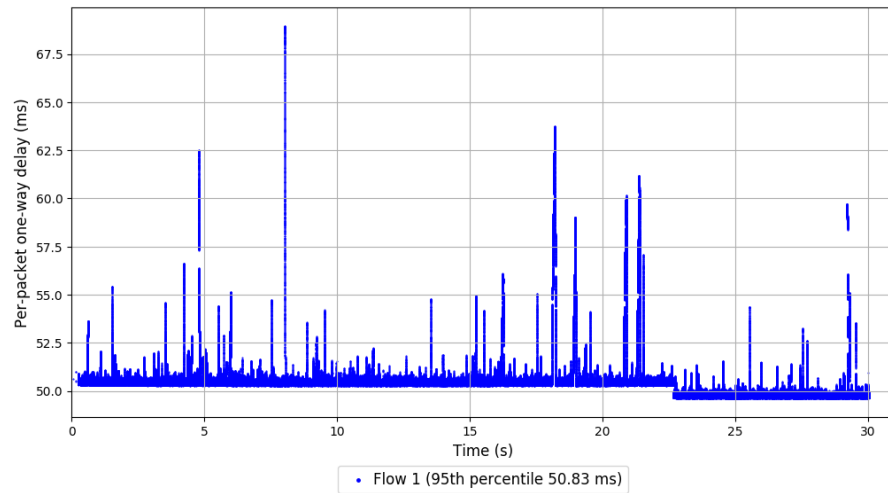
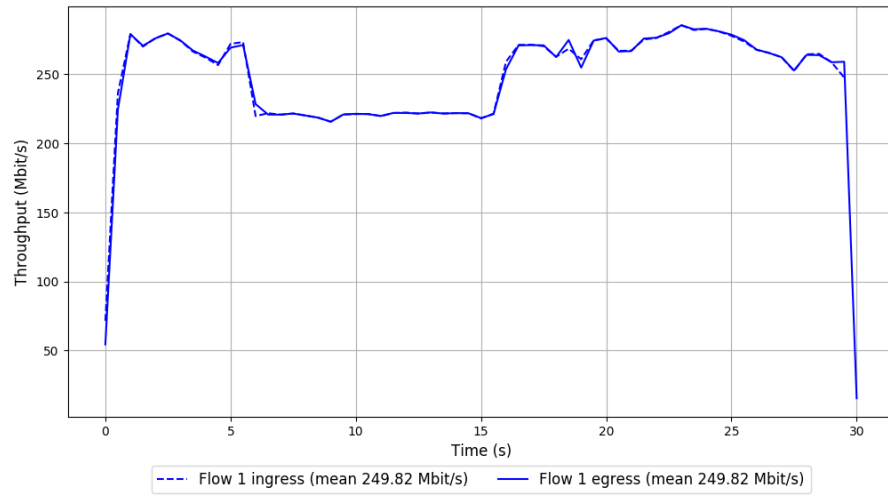


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-13 07:52:00
End at: 2018-02-13 07:52:30

# Below is generated by plot.py at 2018-02-13 10:13:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.82 Mbit/s
95th percentile per-packet one-way delay: 50.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 249.82 Mbit/s
95th percentile per-packet one-way delay: 50.826 ms
Loss rate: 0.00%
```

Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: 2018-02-13 05:48:23

End at: 2018-02-13 05:48:53

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.80 Mbit/s

95th percentile per-packet one-way delay: 59.307 ms

Loss rate: 0.18%

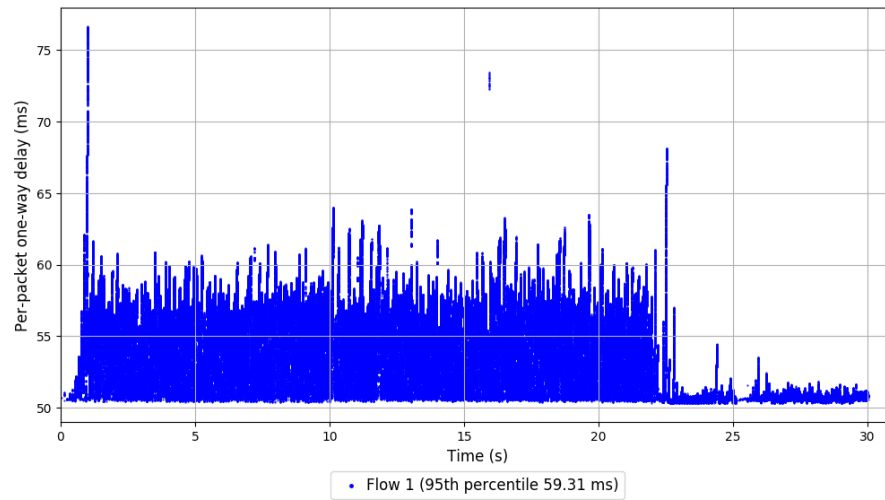
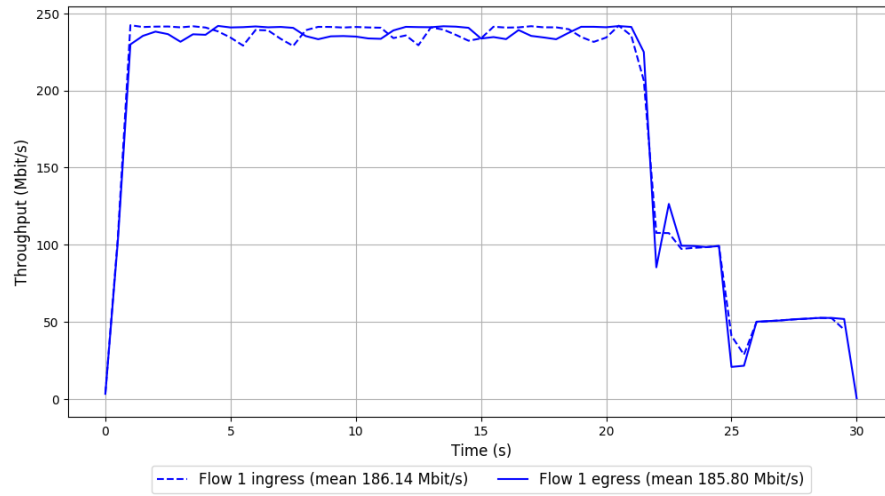
-- Flow 1:

Average throughput: 185.80 Mbit/s

95th percentile per-packet one-way delay: 59.307 ms

Loss rate: 0.18%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-13 06:03:21

End at: 2018-02-13 06:03:51

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.05 Mbit/s

95th percentile per-packet one-way delay: 51.635 ms

Loss rate: 0.92%

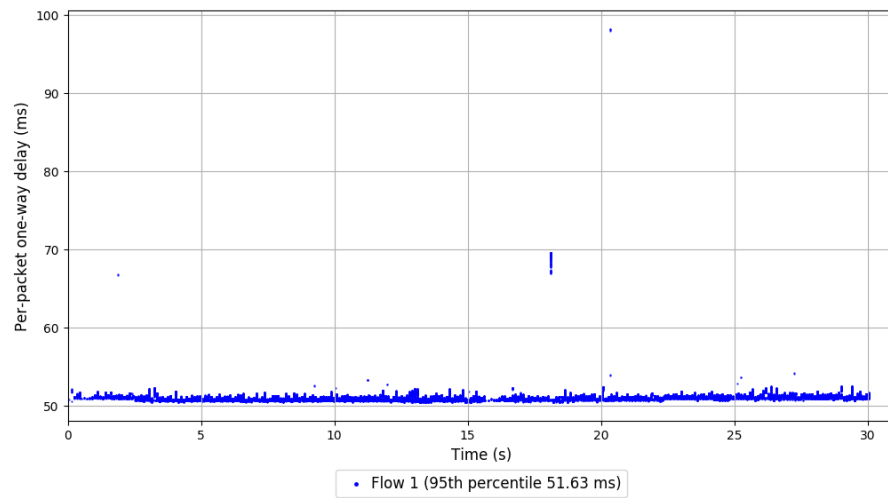
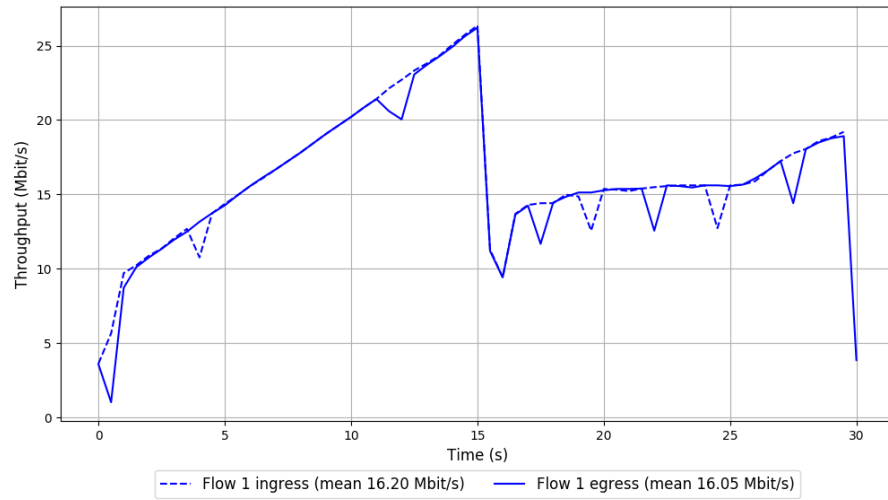
-- Flow 1:

Average throughput: 16.05 Mbit/s

95th percentile per-packet one-way delay: 51.635 ms

Loss rate: 0.92%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-13 06:18:01

End at: 2018-02-13 06:18:31

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.85 Mbit/s

95th percentile per-packet one-way delay: 51.713 ms

Loss rate: 0.53%

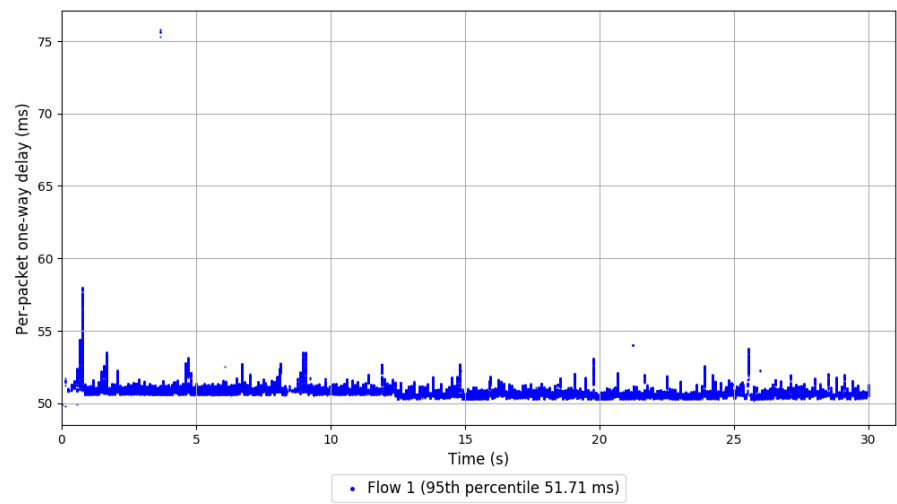
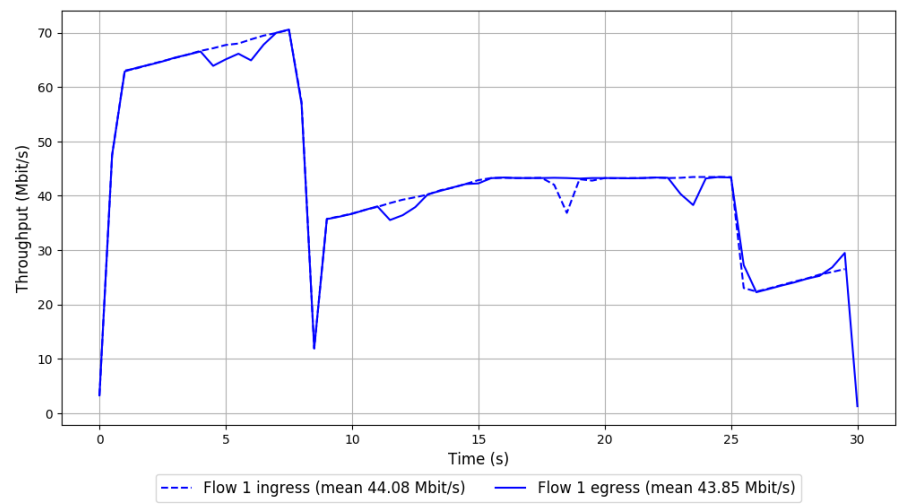
-- Flow 1:

Average throughput: 43.85 Mbit/s

95th percentile per-packet one-way delay: 51.713 ms

Loss rate: 0.53%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-13 06:32:30

End at: 2018-02-13 06:33:00

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 58.599 ms

Loss rate: 0.56%

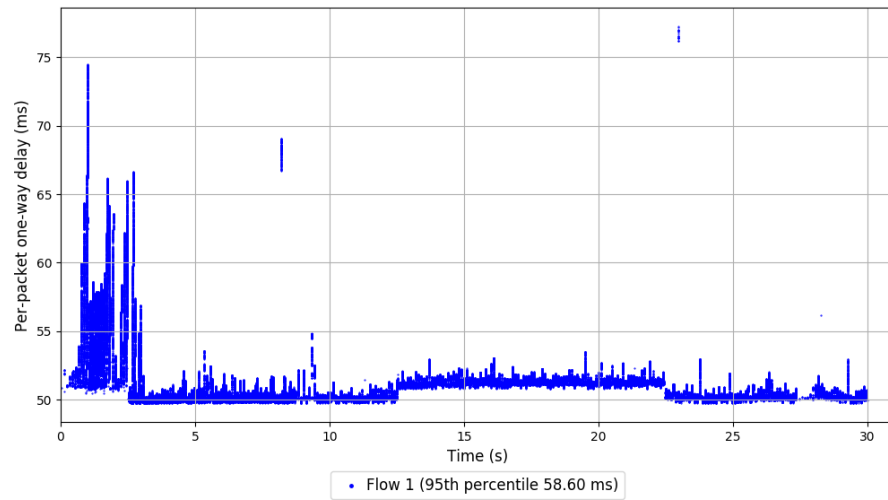
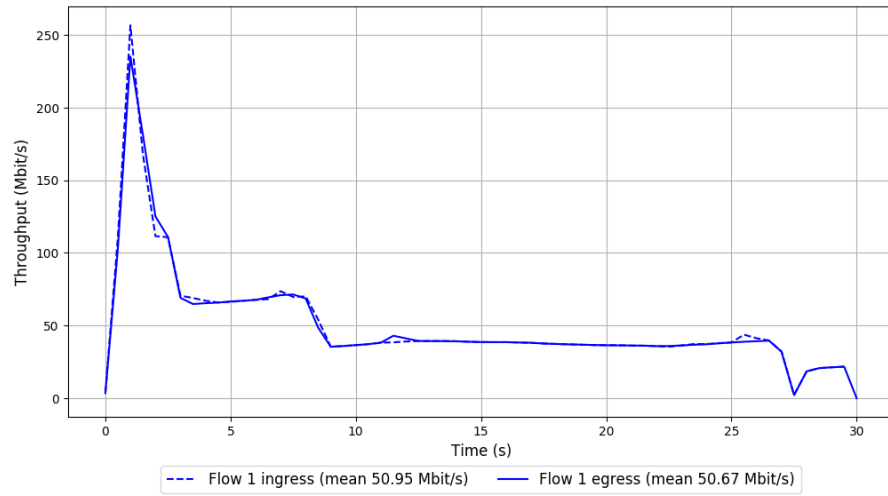
-- Flow 1:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 58.599 ms

Loss rate: 0.56%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-13 06:46:58

End at: 2018-02-13 06:47:28

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.74 Mbit/s

95th percentile per-packet one-way delay: 58.506 ms

Loss rate: 1.09%

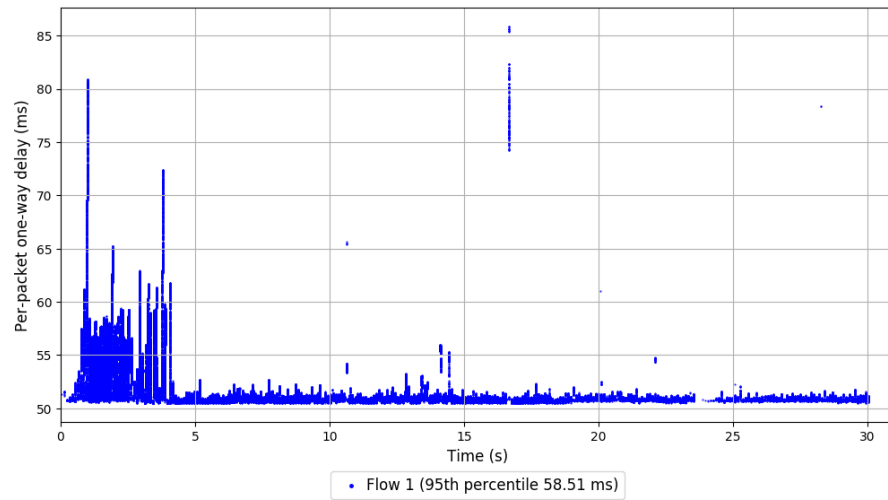
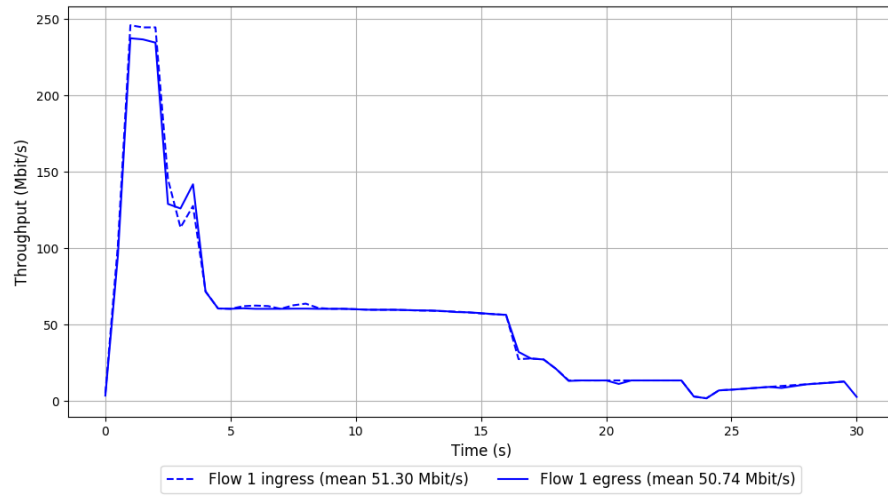
-- Flow 1:

Average throughput: 50.74 Mbit/s

95th percentile per-packet one-way delay: 58.506 ms

Loss rate: 1.09%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-13 07:01:28

End at: 2018-02-13 07:01:58

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.18 Mbit/s

95th percentile per-packet one-way delay: 52.234 ms

Loss rate: 0.43%

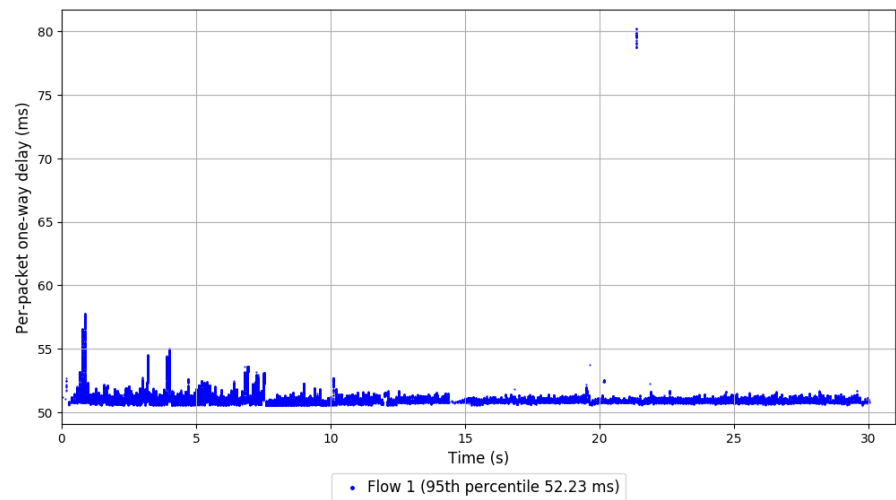
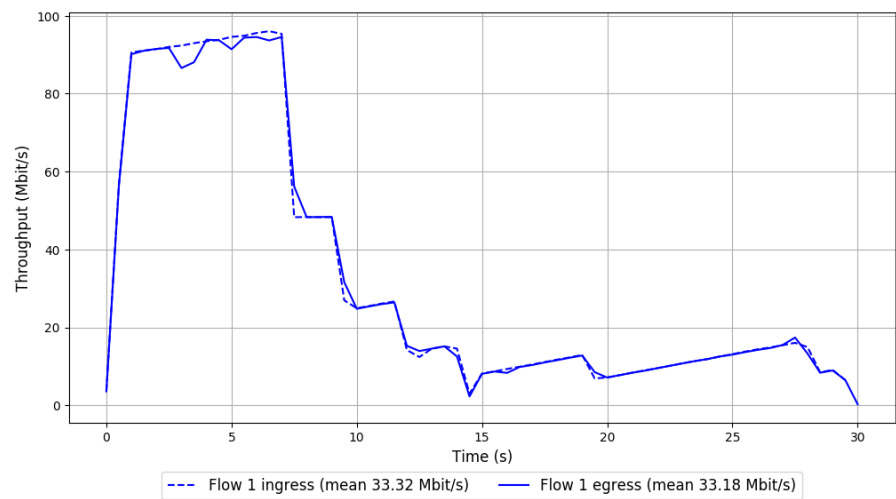
-- Flow 1:

Average throughput: 33.18 Mbit/s

95th percentile per-packet one-way delay: 52.234 ms

Loss rate: 0.43%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-13 07:15:53

End at: 2018-02-13 07:16:23

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.33 Mbit/s

95th percentile per-packet one-way delay: 51.462 ms

Loss rate: 2.15%

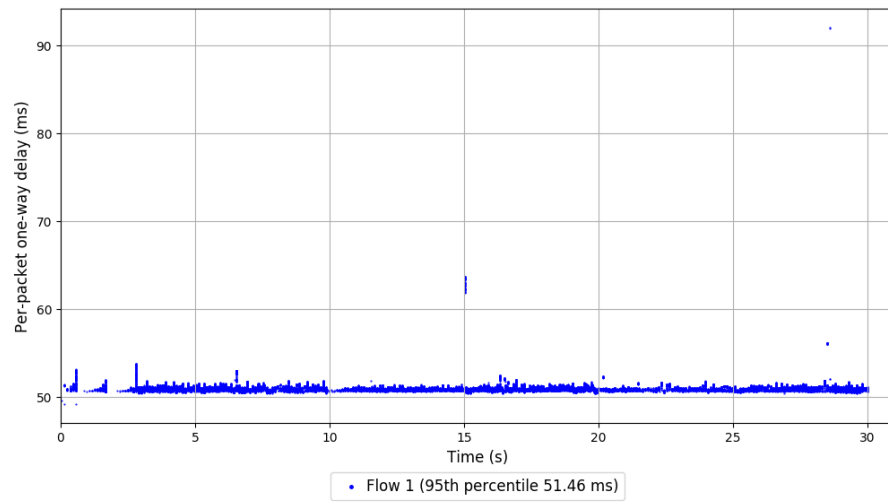
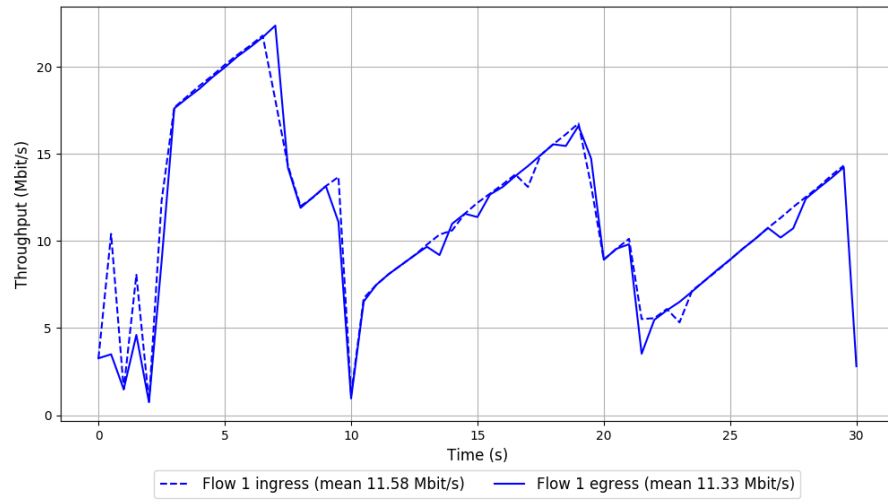
-- Flow 1:

Average throughput: 11.33 Mbit/s

95th percentile per-packet one-way delay: 51.462 ms

Loss rate: 2.15%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-13 07:30:20

End at: 2018-02-13 07:30:50

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.13 Mbit/s

95th percentile per-packet one-way delay: 60.173 ms

Loss rate: 1.03%

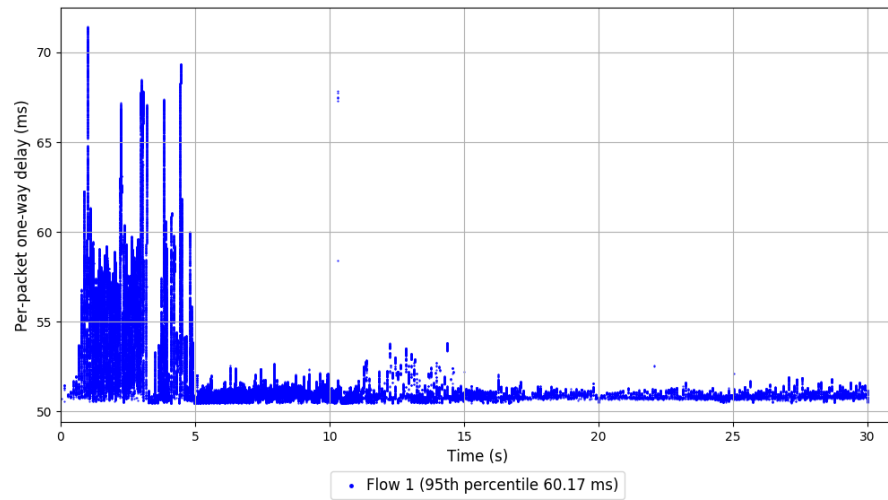
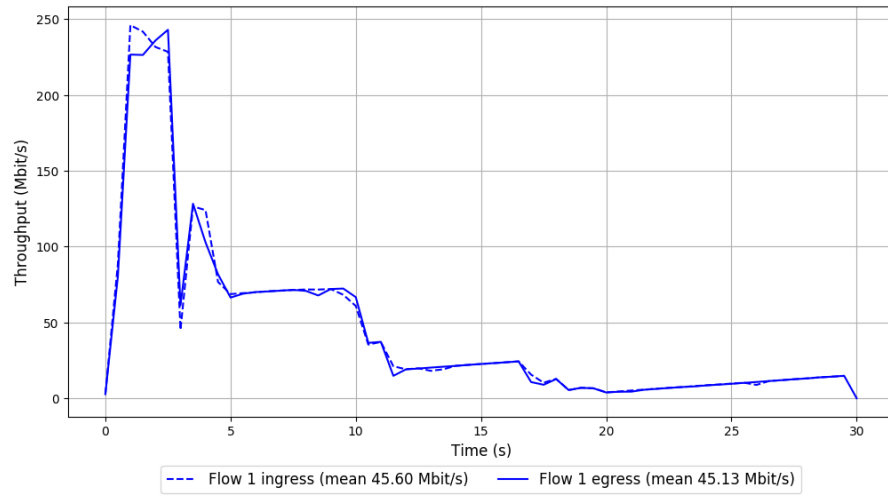
-- Flow 1:

Average throughput: 45.13 Mbit/s

95th percentile per-packet one-way delay: 60.173 ms

Loss rate: 1.03%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-13 07:44:54

End at: 2018-02-13 07:45:24

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 58.451 ms

Loss rate: 1.19%

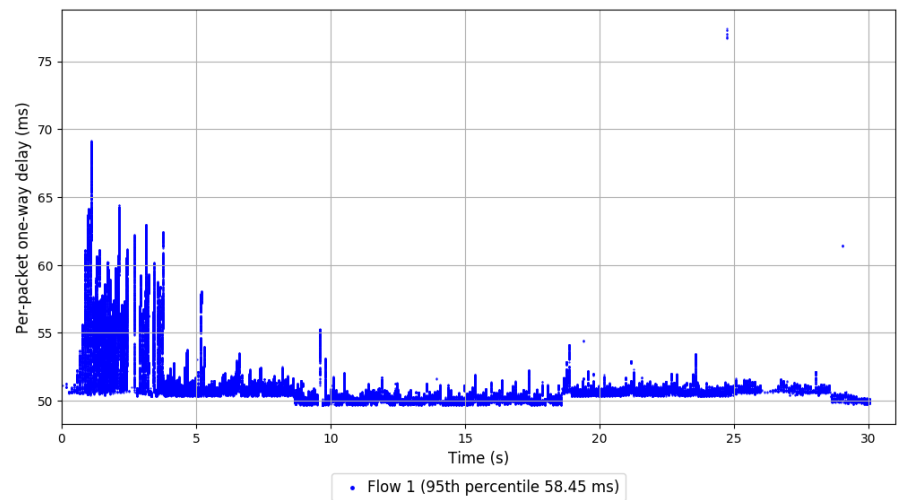
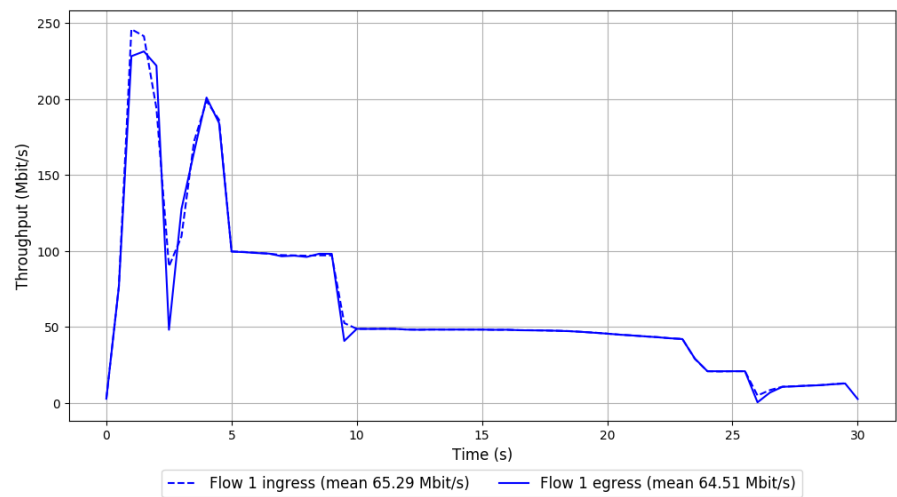
-- Flow 1:

Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 58.451 ms

Loss rate: 1.19%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-13 07:59:27

End at: 2018-02-13 07:59:57

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.80 Mbit/s

95th percentile per-packet one-way delay: 58.837 ms

Loss rate: 1.30%

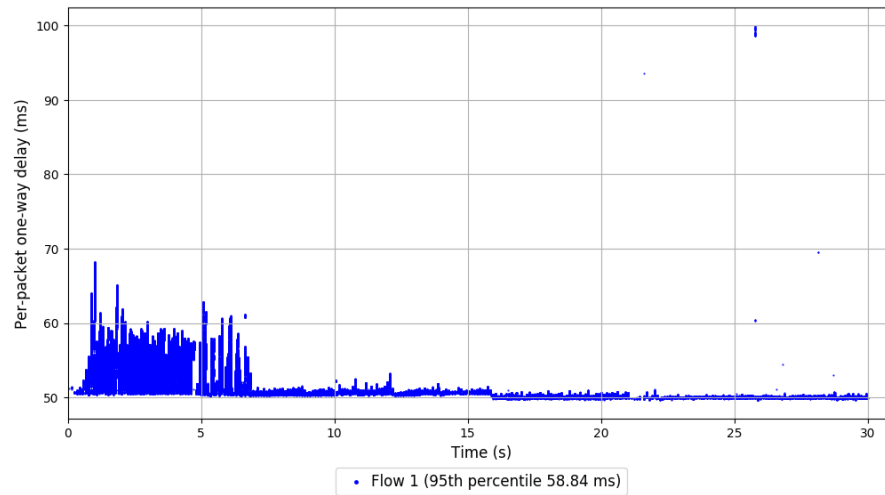
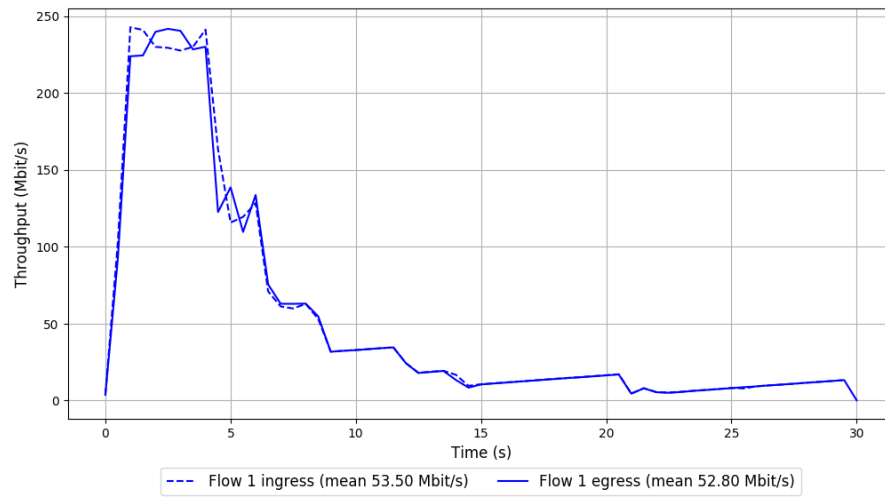
-- Flow 1:

Average throughput: 52.80 Mbit/s

95th percentile per-packet one-way delay: 58.837 ms

Loss rate: 1.30%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-13 05:41:46

End at: 2018-02-13 05:42:16

Below is generated by plot.py at 2018-02-13 10:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 272.13 Mbit/s

95th percentile per-packet one-way delay: 173.769 ms

Loss rate: 0.22%

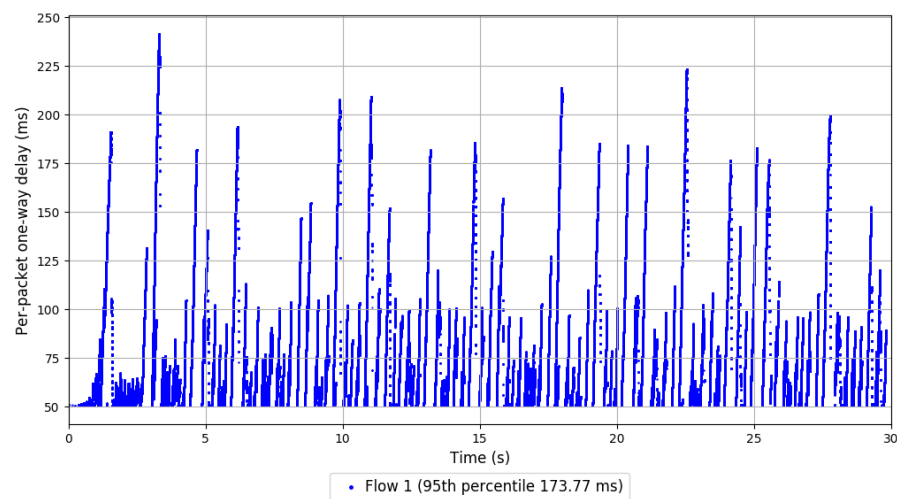
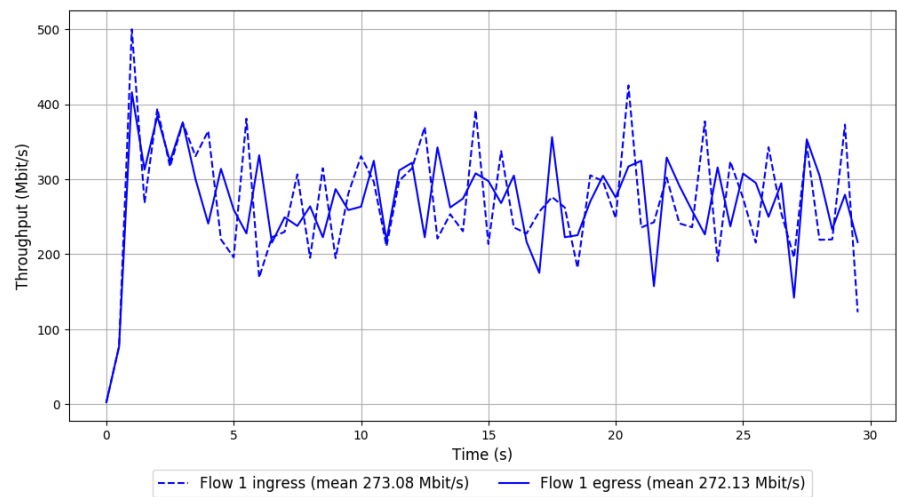
-- Flow 1:

Average throughput: 272.13 Mbit/s

95th percentile per-packet one-way delay: 173.769 ms

Loss rate: 0.22%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-13 05:56:43

End at: 2018-02-13 05:57:13

Below is generated by plot.py at 2018-02-13 10:13:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 295.97 Mbit/s

95th percentile per-packet one-way delay: 90.555 ms

Loss rate: 0.34%

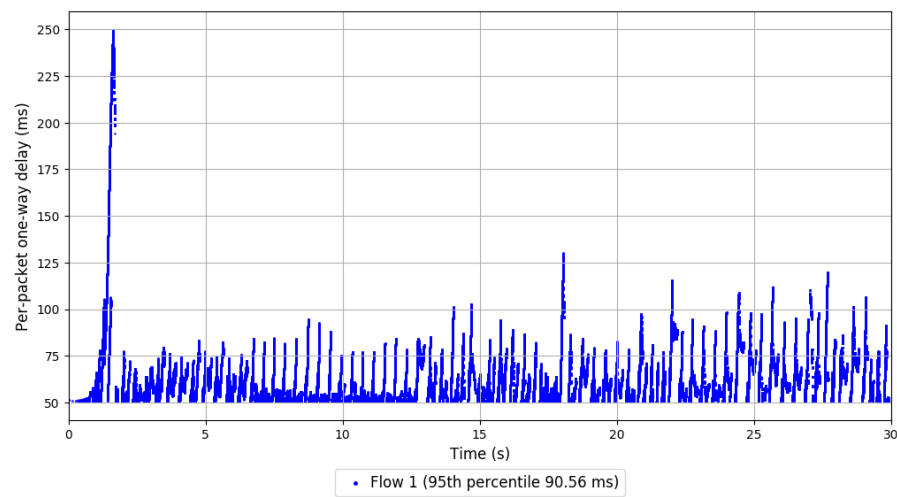
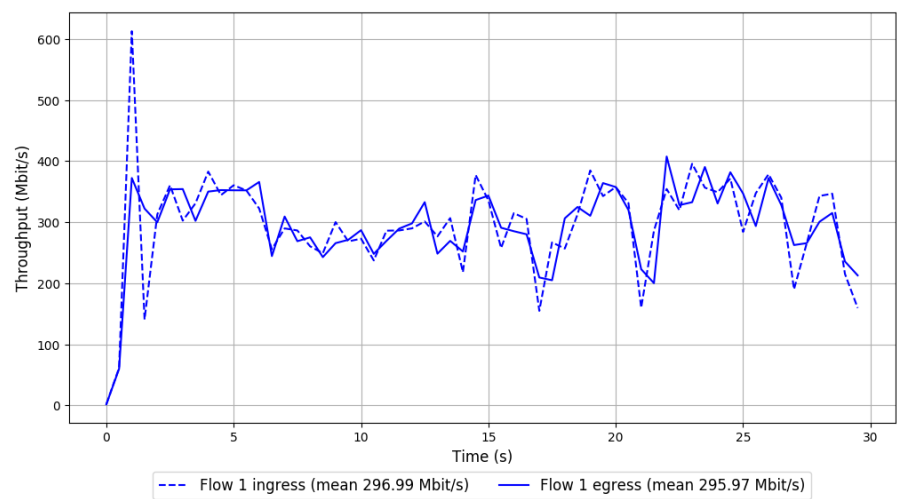
-- Flow 1:

Average throughput: 295.97 Mbit/s

95th percentile per-packet one-way delay: 90.555 ms

Loss rate: 0.34%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-13 06:11:25

End at: 2018-02-13 06:11:55

Below is generated by plot.py at 2018-02-13 10:13:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 287.44 Mbit/s

95th percentile per-packet one-way delay: 91.730 ms

Loss rate: 1.05%

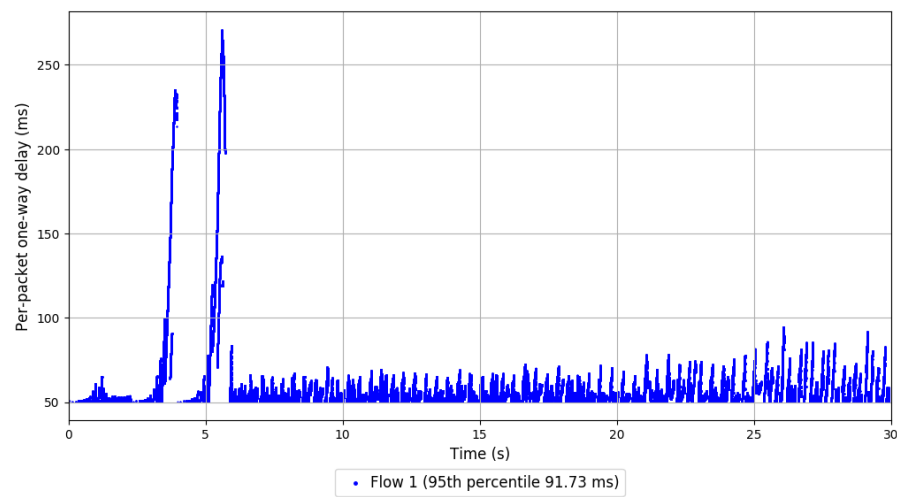
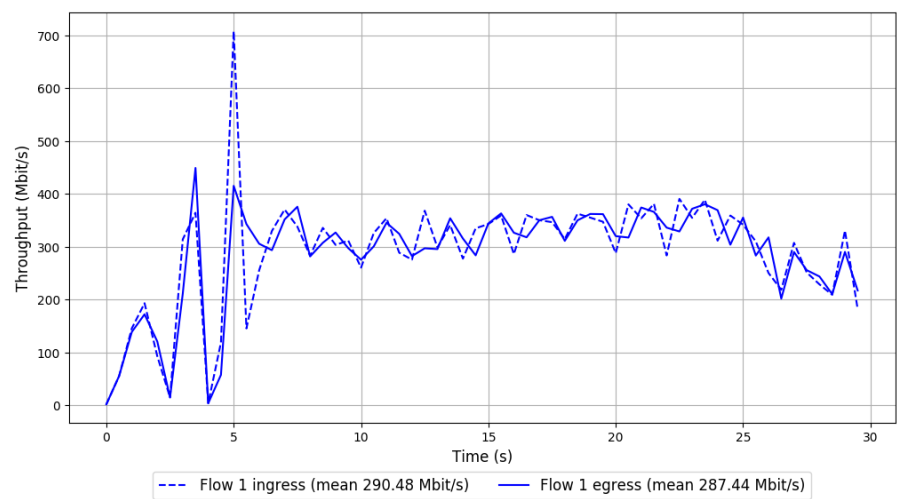
-- Flow 1:

Average throughput: 287.44 Mbit/s

95th percentile per-packet one-way delay: 91.730 ms

Loss rate: 1.05%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-13 06:26:07

End at: 2018-02-13 06:26:37

Below is generated by plot.py at 2018-02-13 10:13:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.01 Mbit/s

95th percentile per-packet one-way delay: 114.218 ms

Loss rate: 0.17%

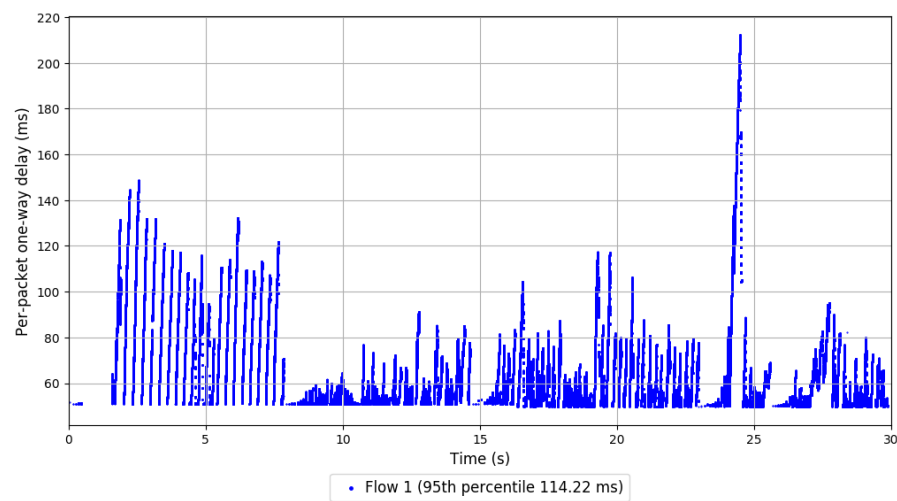
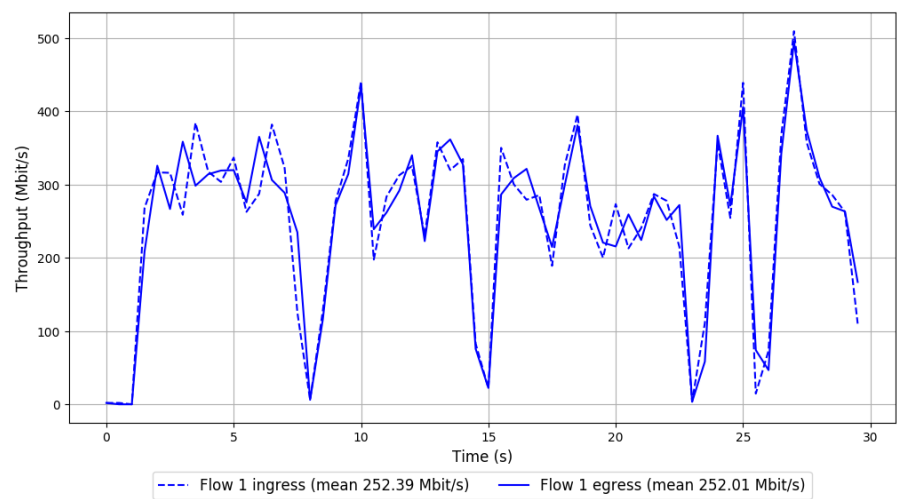
-- Flow 1:

Average throughput: 252.01 Mbit/s

95th percentile per-packet one-way delay: 114.218 ms

Loss rate: 0.17%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-13 06:40:34

End at: 2018-02-13 06:41:04

Below is generated by plot.py at 2018-02-13 10:13:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.88 Mbit/s

95th percentile per-packet one-way delay: 166.178 ms

Loss rate: 1.99%

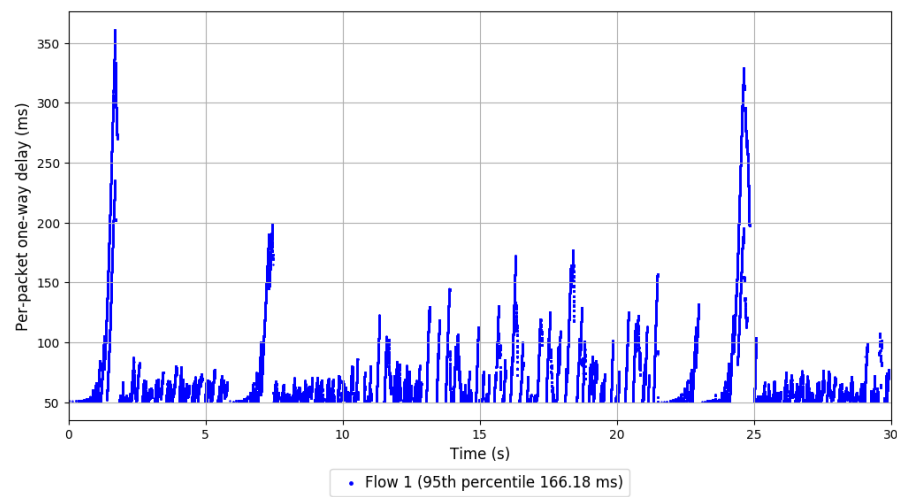
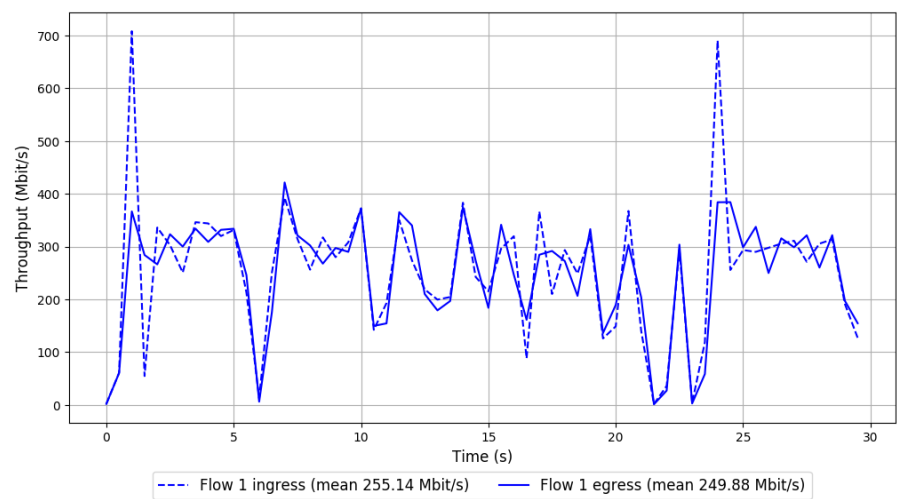
-- Flow 1:

Average throughput: 249.88 Mbit/s

95th percentile per-packet one-way delay: 166.178 ms

Loss rate: 1.99%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-13 06:55:03

End at: 2018-02-13 06:55:33

Below is generated by plot.py at 2018-02-13 10:15:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.64 Mbit/s

95th percentile per-packet one-way delay: 244.289 ms

Loss rate: 3.28%

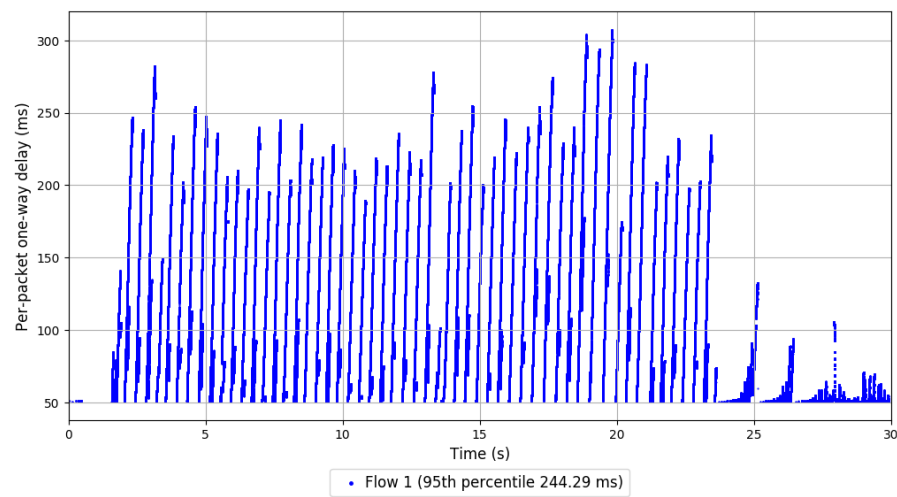
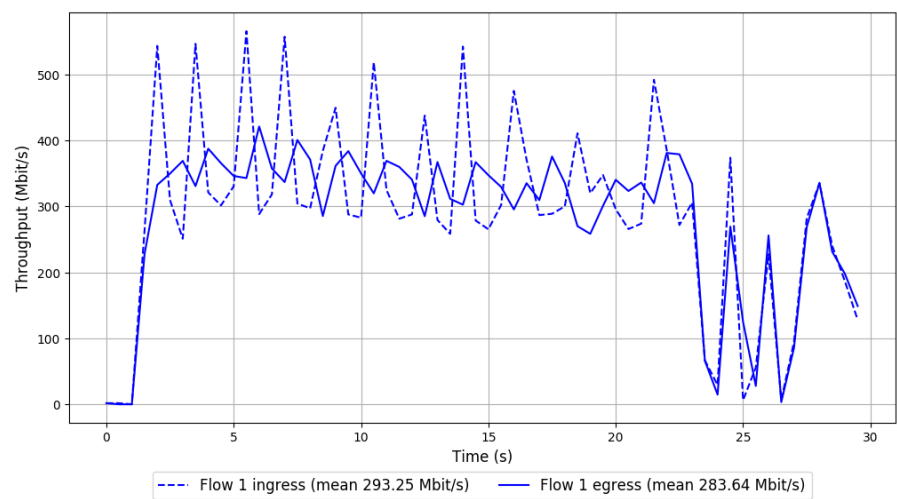
-- Flow 1:

Average throughput: 283.64 Mbit/s

95th percentile per-packet one-way delay: 244.289 ms

Loss rate: 3.28%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-13 07:09:29

End at: 2018-02-13 07:09:59

Below is generated by plot.py at 2018-02-13 10:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 282.44 Mbit/s

95th percentile per-packet one-way delay: 144.743 ms

Loss rate: 0.16%

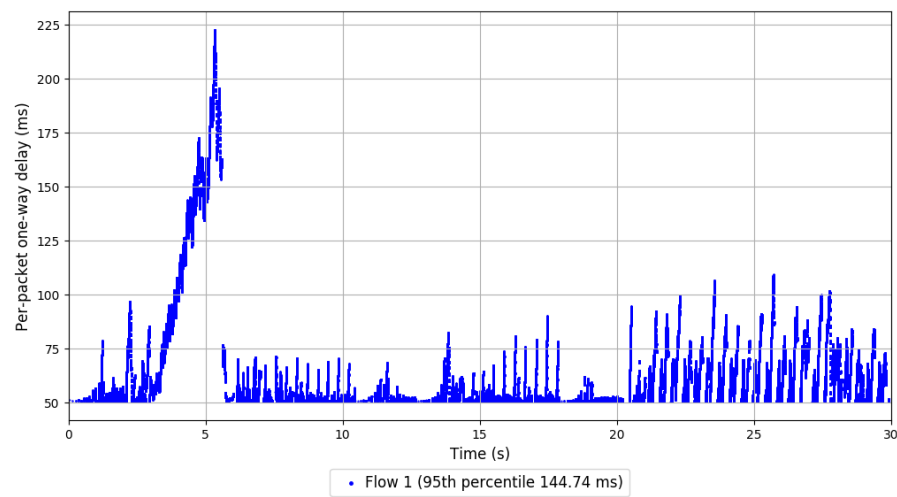
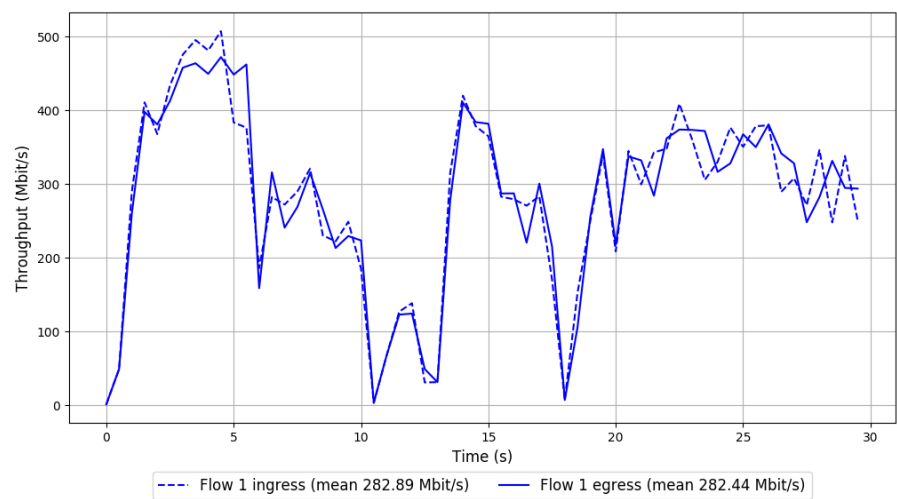
-- Flow 1:

Average throughput: 282.44 Mbit/s

95th percentile per-packet one-way delay: 144.743 ms

Loss rate: 0.16%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-13 07:23:54

End at: 2018-02-13 07:24:24

Below is generated by plot.py at 2018-02-13 10:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 277.27 Mbit/s

95th percentile per-packet one-way delay: 119.338 ms

Loss rate: 0.29%

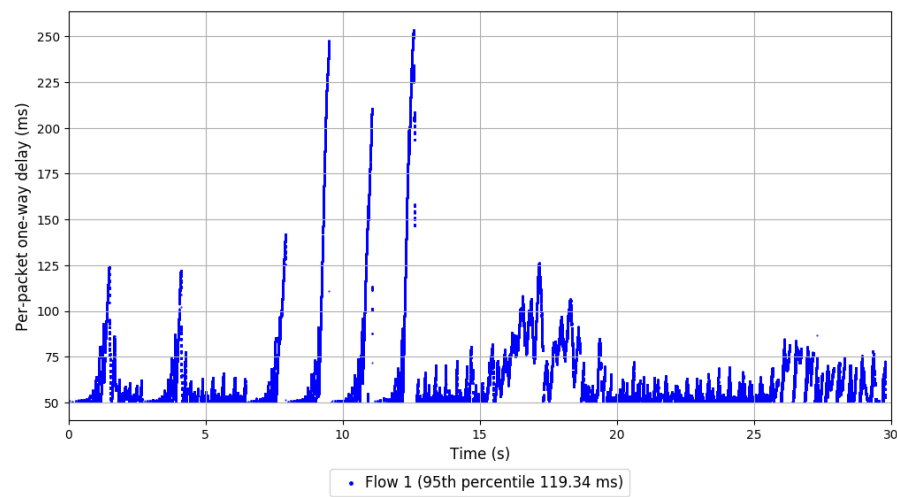
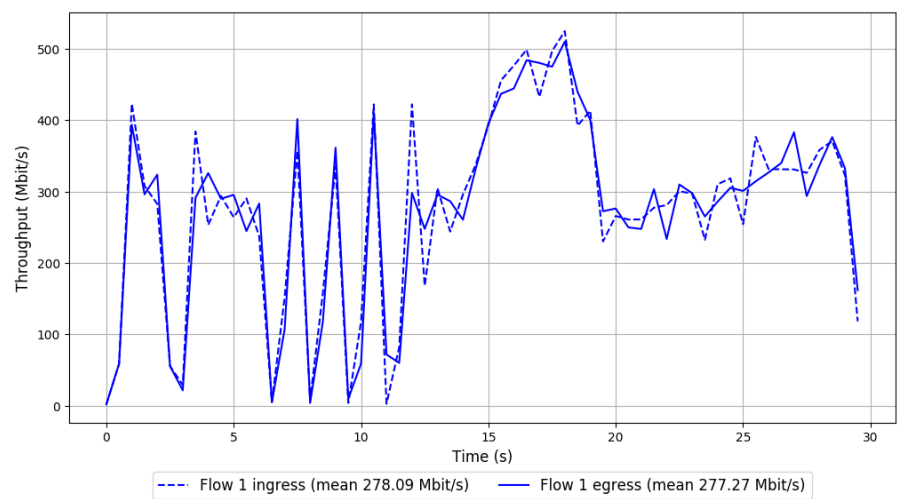
-- Flow 1:

Average throughput: 277.27 Mbit/s

95th percentile per-packet one-way delay: 119.338 ms

Loss rate: 0.29%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-13 07:38:21

End at: 2018-02-13 07:38:51

Below is generated by plot.py at 2018-02-13 10:17:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 277.60 Mbit/s

95th percentile per-packet one-way delay: 84.822 ms

Loss rate: 0.96%

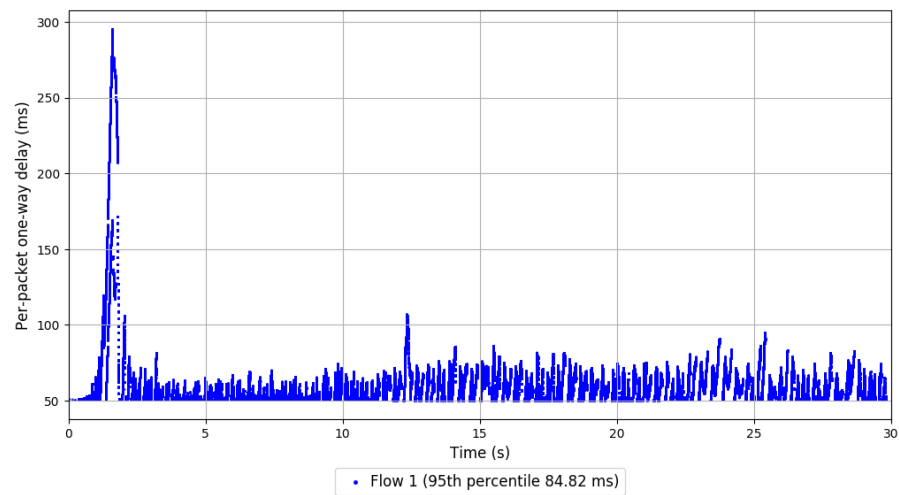
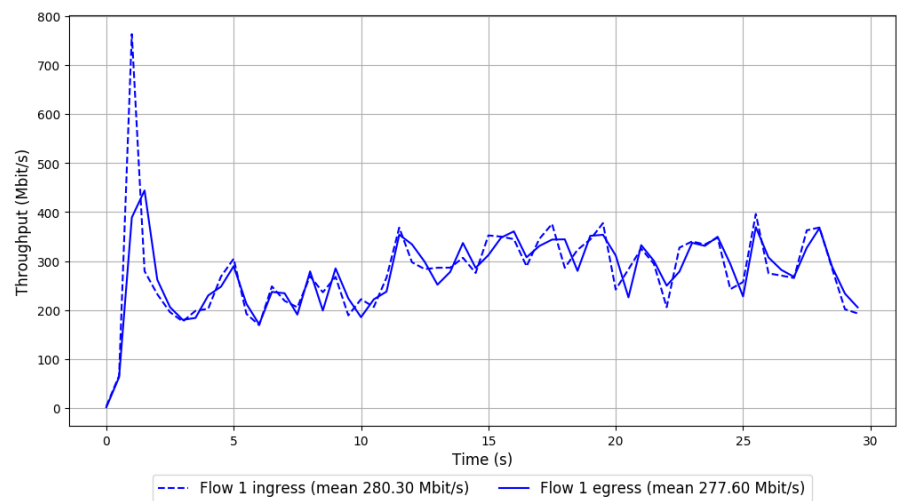
-- Flow 1:

Average throughput: 277.60 Mbit/s

95th percentile per-packet one-way delay: 84.822 ms

Loss rate: 0.96%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-13 07:52:58

End at: 2018-02-13 07:53:28

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 286.96 Mbit/s

95th percentile per-packet one-way delay: 86.306 ms

Loss rate: 1.23%

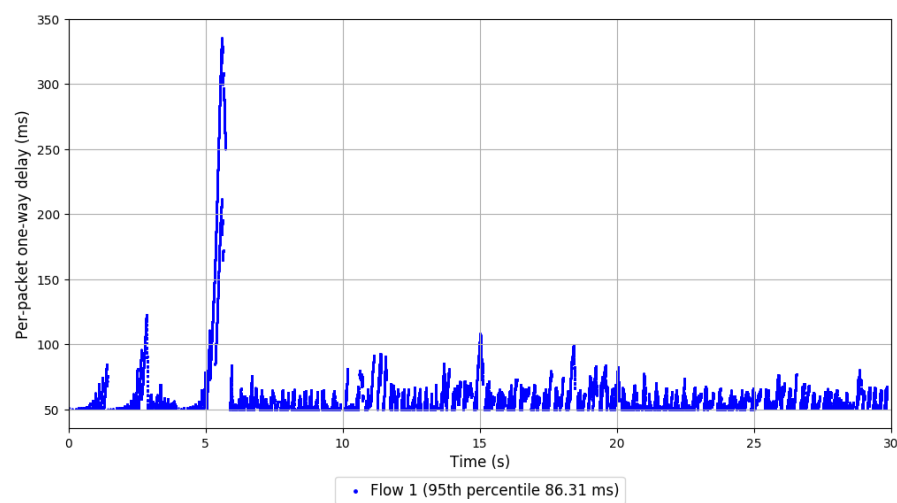
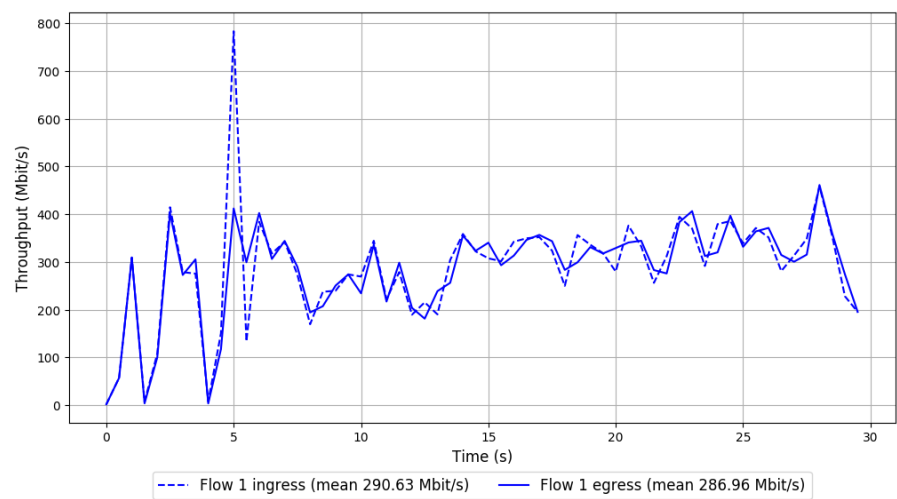
-- Flow 1:

Average throughput: 286.96 Mbit/s

95th percentile per-packet one-way delay: 86.306 ms

Loss rate: 1.23%

Run 10: Report of Verus — Data Link

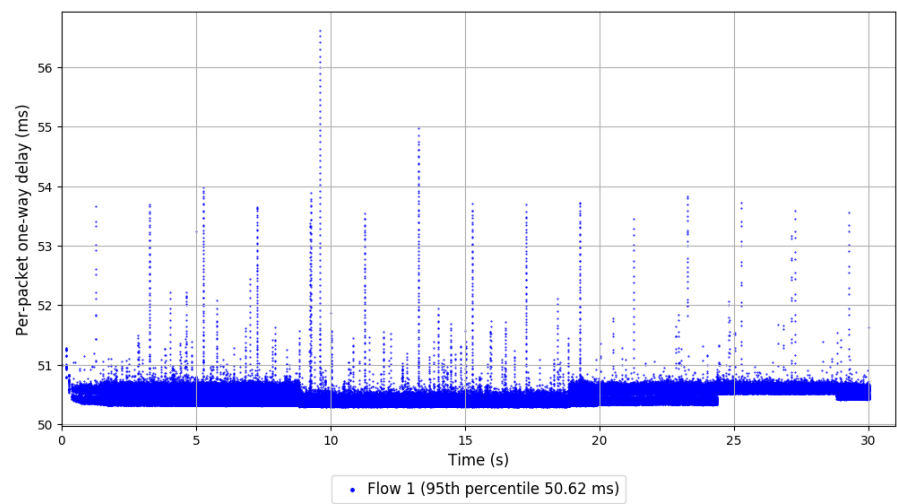
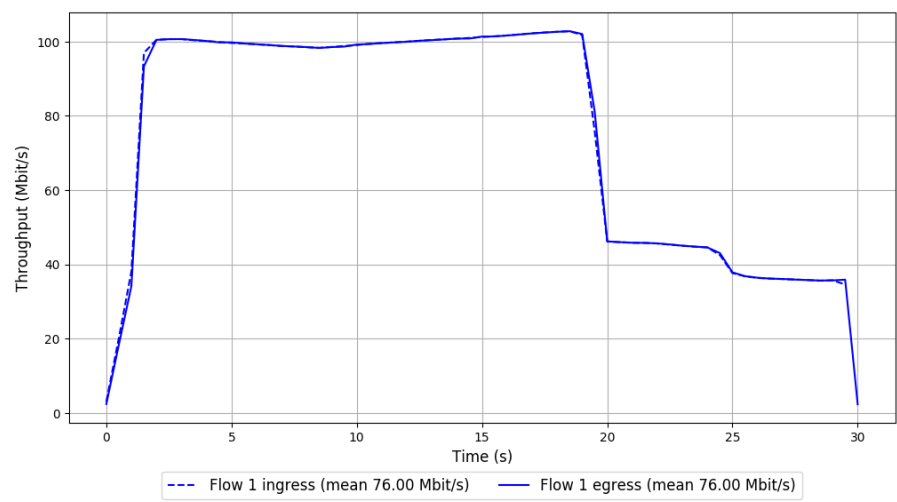


```
Run 1: Statistics of Copa

Start at: 2018-02-13 05:42:39
End at: 2018-02-13 05:43:09

# Below is generated by plot.py at 2018-02-13 10:17:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 50.625 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 50.625 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-13 05:57:38

End at: 2018-02-13 05:58:08

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.85 Mbit/s

95th percentile per-packet one-way delay: 50.789 ms

Loss rate: 0.00%

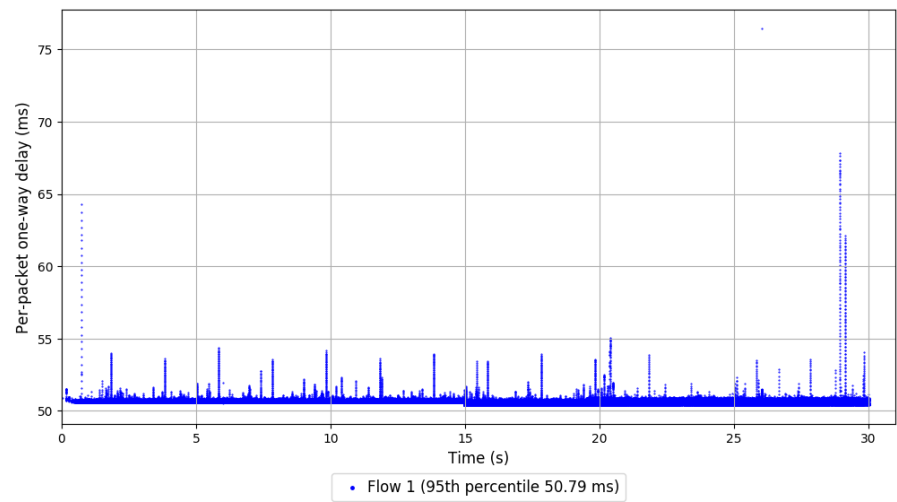
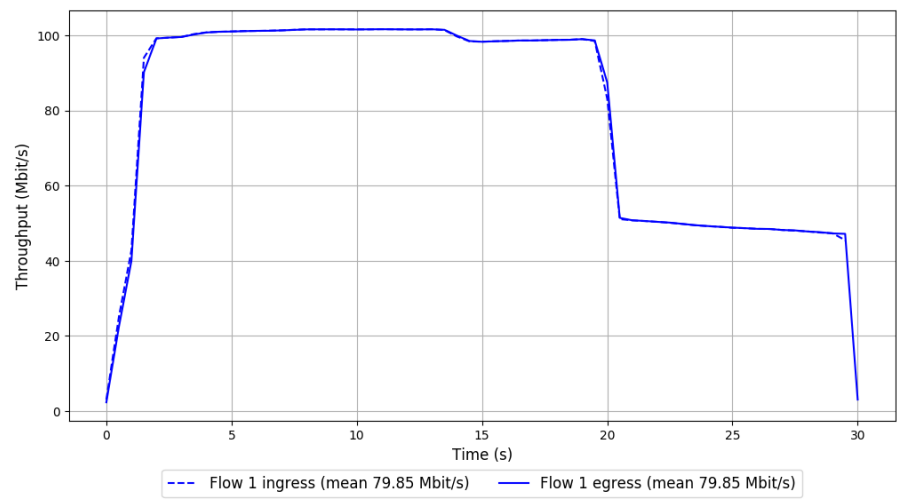
-- Flow 1:

Average throughput: 79.85 Mbit/s

95th percentile per-packet one-way delay: 50.789 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-13 06:12:19

End at: 2018-02-13 06:12:49

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.50 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 0.00%

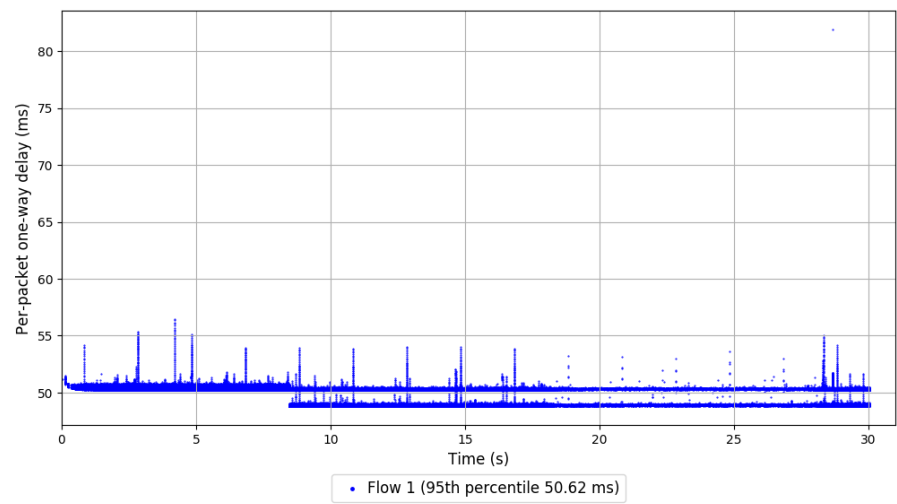
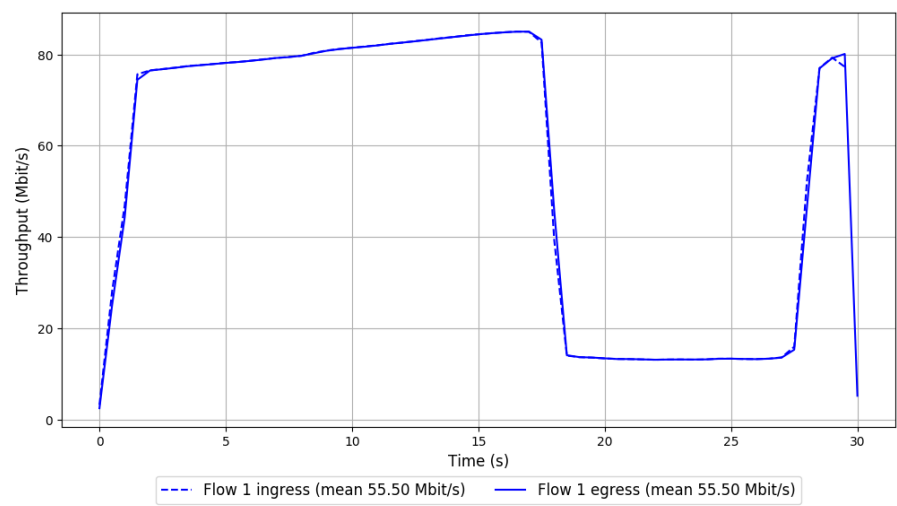
-- Flow 1:

Average throughput: 55.50 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-13 06:26:58

End at: 2018-02-13 06:27:28

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.94 Mbit/s

95th percentile per-packet one-way delay: 50.753 ms

Loss rate: 0.00%

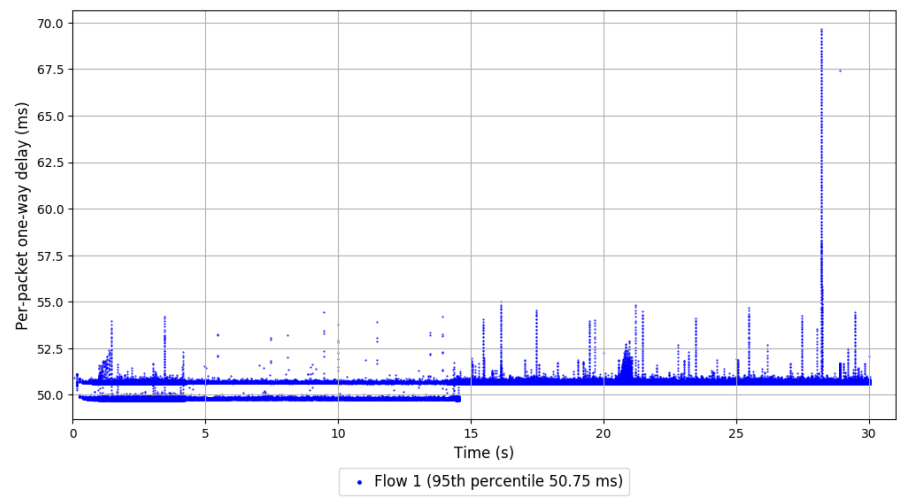
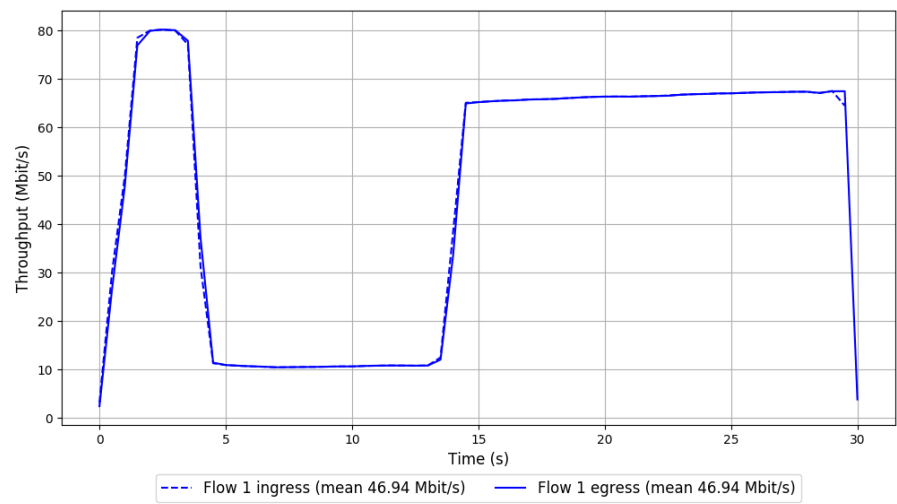
-- Flow 1:

Average throughput: 46.94 Mbit/s

95th percentile per-packet one-way delay: 50.753 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-13 06:41:26

End at: 2018-02-13 06:41:56

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.09 Mbit/s

95th percentile per-packet one-way delay: 51.170 ms

Loss rate: 0.00%

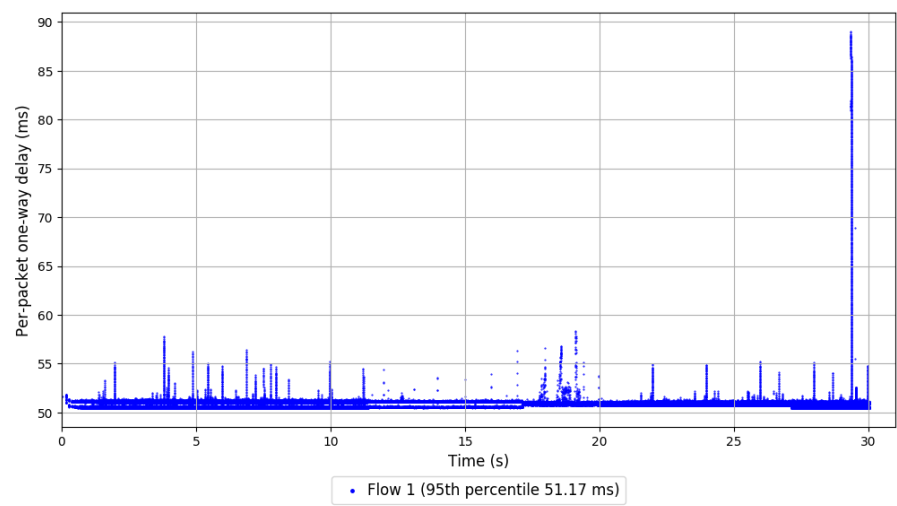
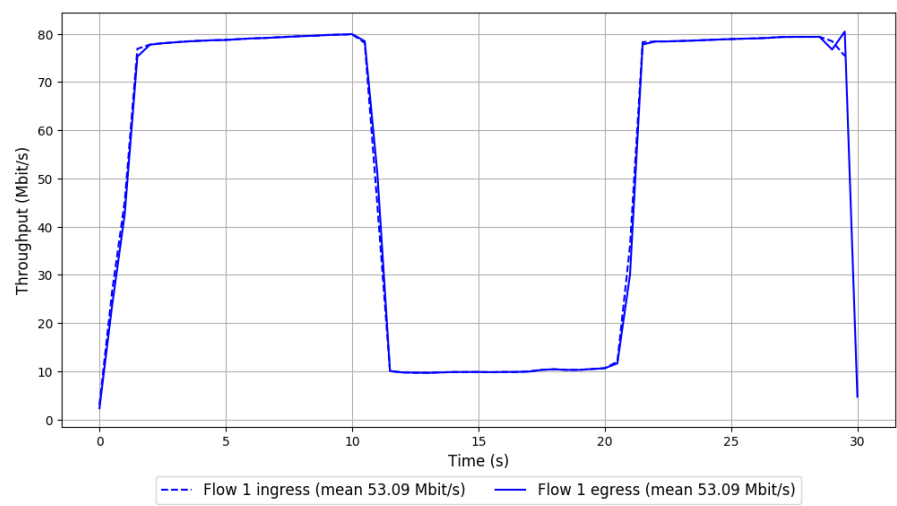
-- Flow 1:

Average throughput: 53.09 Mbit/s

95th percentile per-packet one-way delay: 51.170 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-13 06:55:57

End at: 2018-02-13 06:56:27

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 51.219 ms

Loss rate: 0.00%

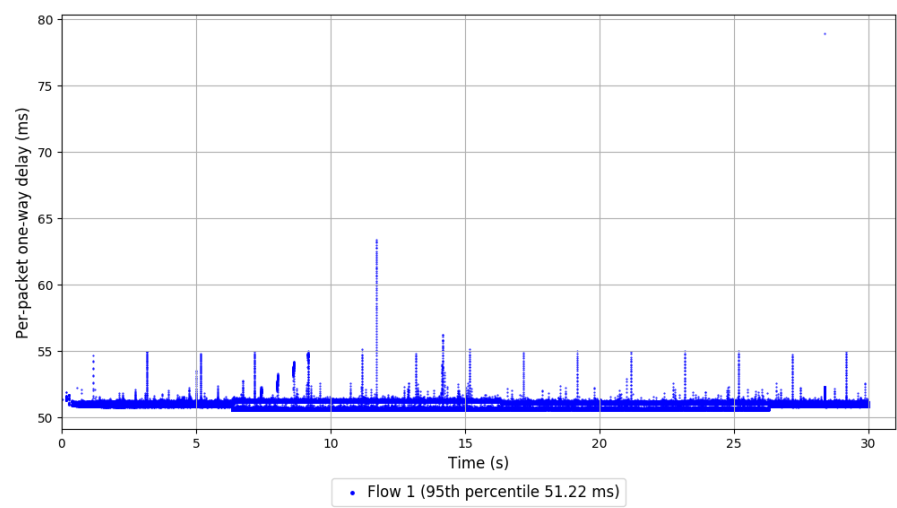
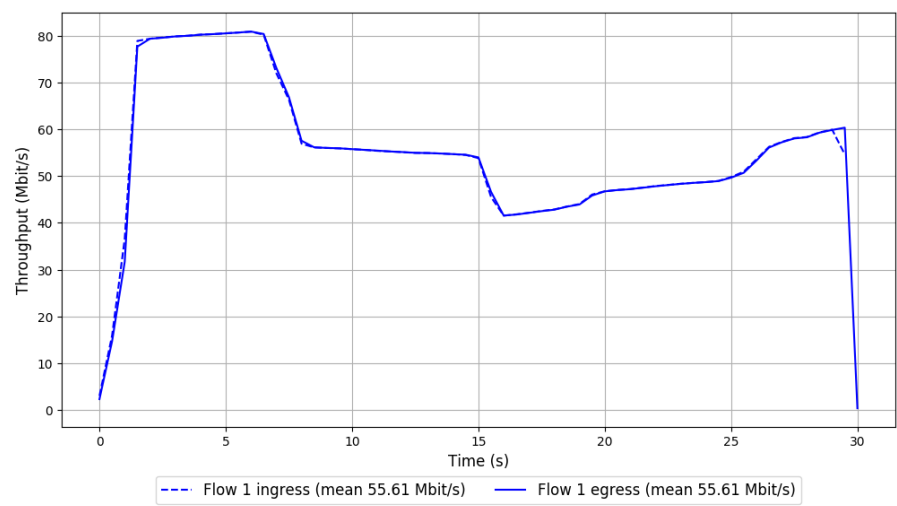
-- Flow 1:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 51.219 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-13 07:10:22

End at: 2018-02-13 07:10:52

Below is generated by plot.py at 2018-02-13 10:17:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.11 Mbit/s

95th percentile per-packet one-way delay: 50.591 ms

Loss rate: 0.00%

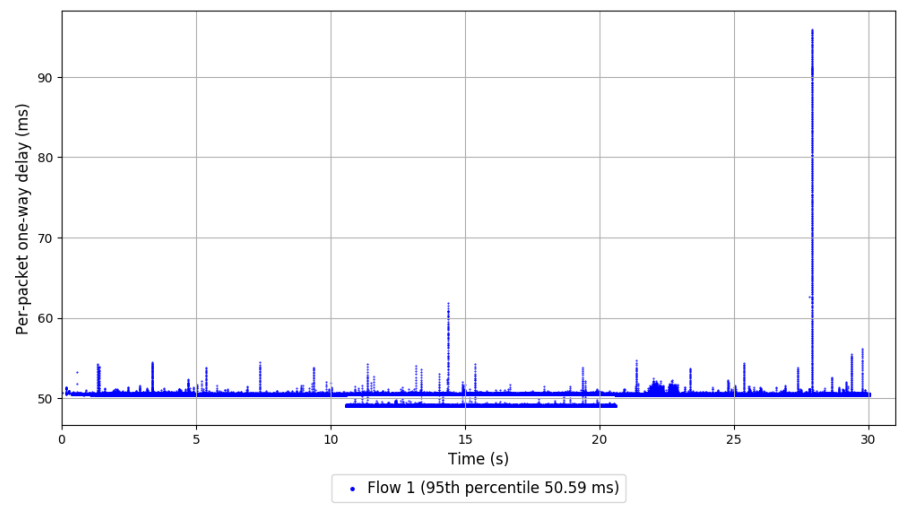
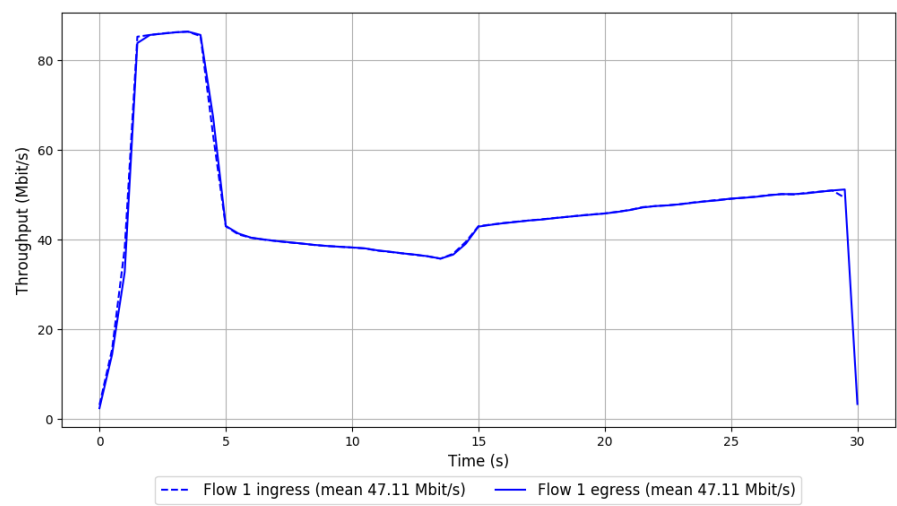
-- Flow 1:

Average throughput: 47.11 Mbit/s

95th percentile per-packet one-way delay: 50.591 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-13 07:24:48

End at: 2018-02-13 07:25:18

Below is generated by plot.py at 2018-02-13 10:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.55 Mbit/s

95th percentile per-packet one-way delay: 50.967 ms

Loss rate: 0.00%

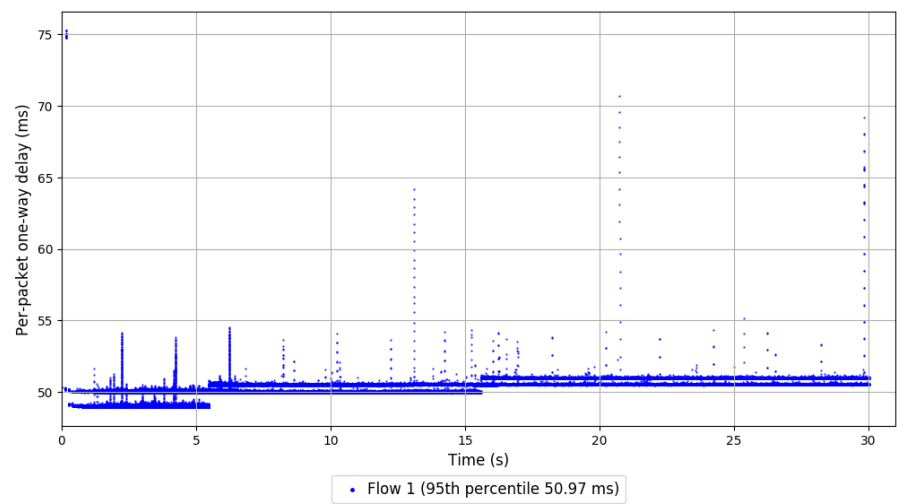
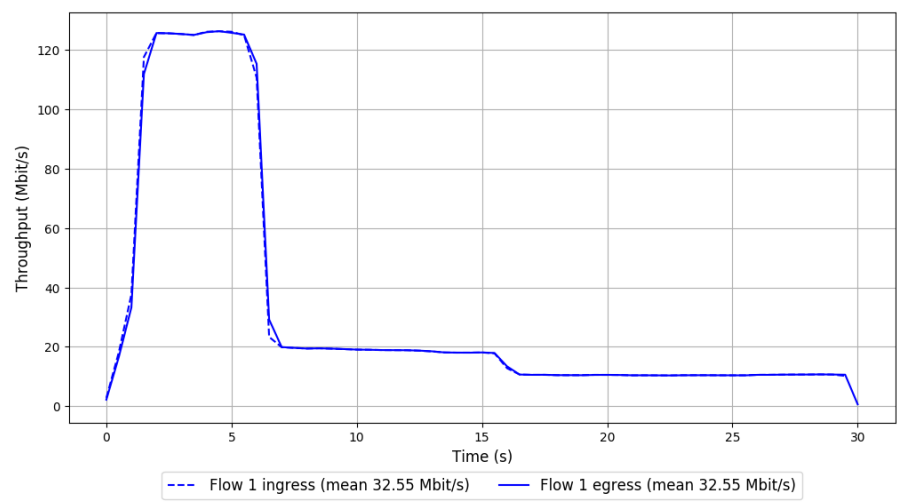
-- Flow 1:

Average throughput: 32.55 Mbit/s

95th percentile per-packet one-way delay: 50.967 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-13 07:39:15

End at: 2018-02-13 07:39:45

Below is generated by plot.py at 2018-02-13 10:18:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.42 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.08%

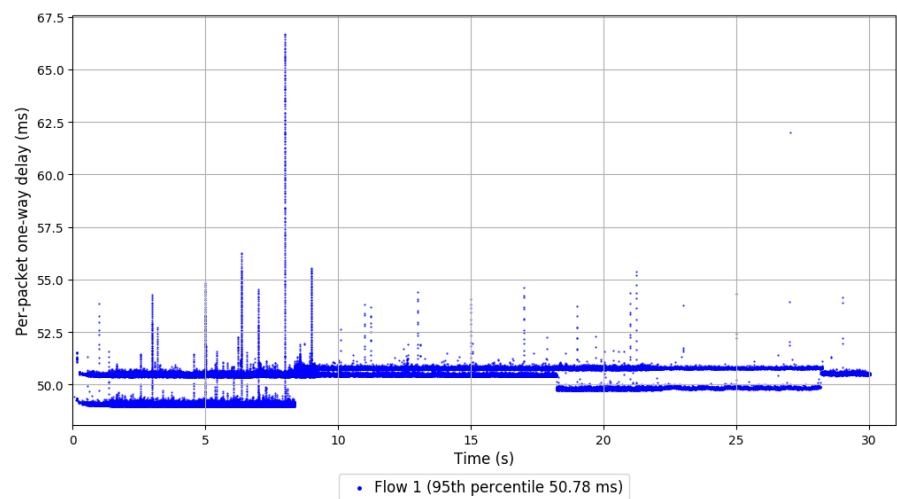
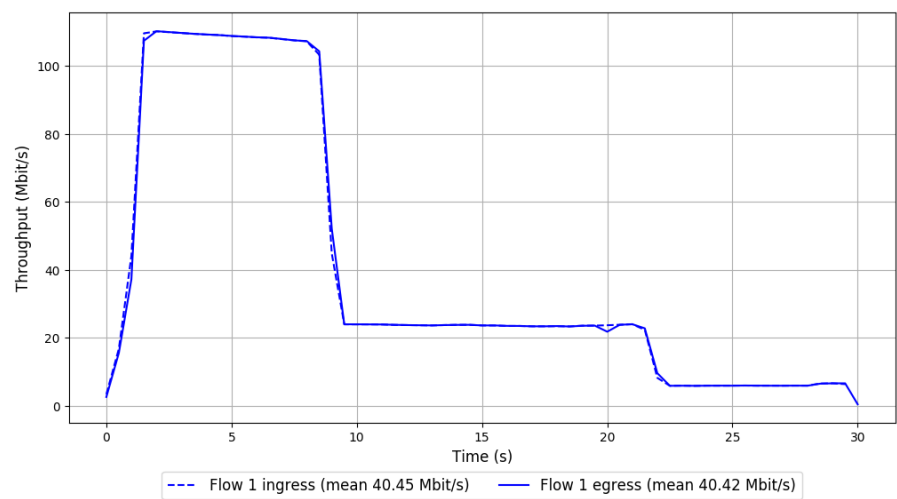
-- Flow 1:

Average throughput: 40.42 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.08%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-13 07:53:51

End at: 2018-02-13 07:54:21

Below is generated by plot.py at 2018-02-13 10:19:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.44 Mbit/s

95th percentile per-packet one-way delay: 49.811 ms

Loss rate: 0.00%

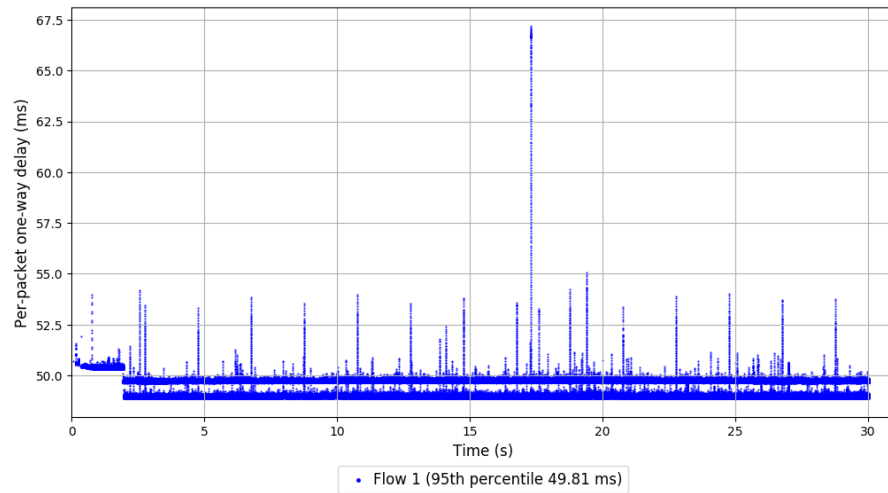
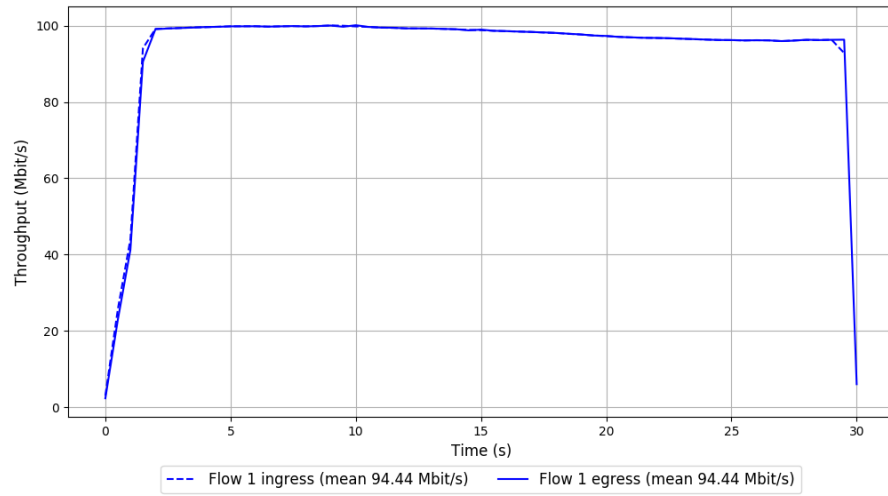
-- Flow 1:

Average throughput: 94.44 Mbit/s

95th percentile per-packet one-way delay: 49.811 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

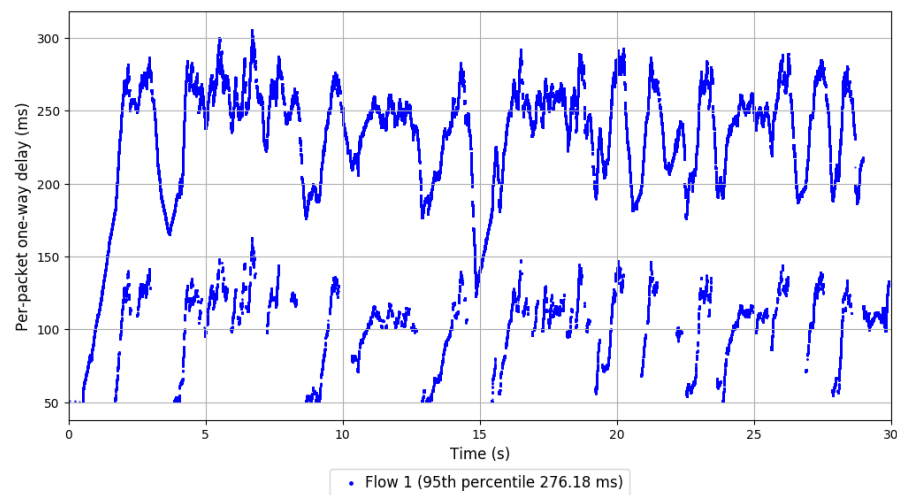
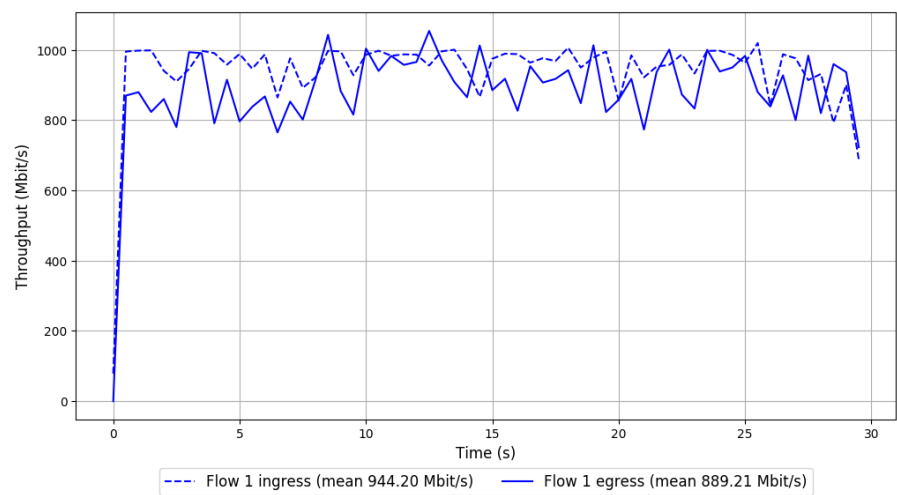


```
Run 1: Statistics of FillP

Start at: 2018-02-13 05:39:04
End at: 2018-02-13 05:39:34

# Below is generated by plot.py at 2018-02-13 10:31:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 889.21 Mbit/s
95th percentile per-packet one-way delay: 276.181 ms
Loss rate: 5.82%
-- Flow 1:
Average throughput: 889.21 Mbit/s
95th percentile per-packet one-way delay: 276.181 ms
Loss rate: 5.82%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-13 05:53:52

End at: 2018-02-13 05:54:22

Below is generated by plot.py at 2018-02-13 10:31:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 826.39 Mbit/s

95th percentile per-packet one-way delay: 299.286 ms

Loss rate: 9.88%

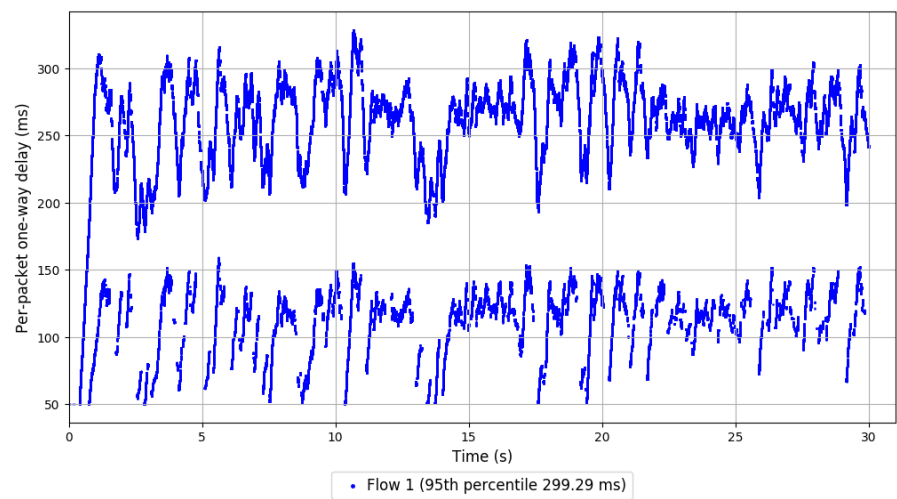
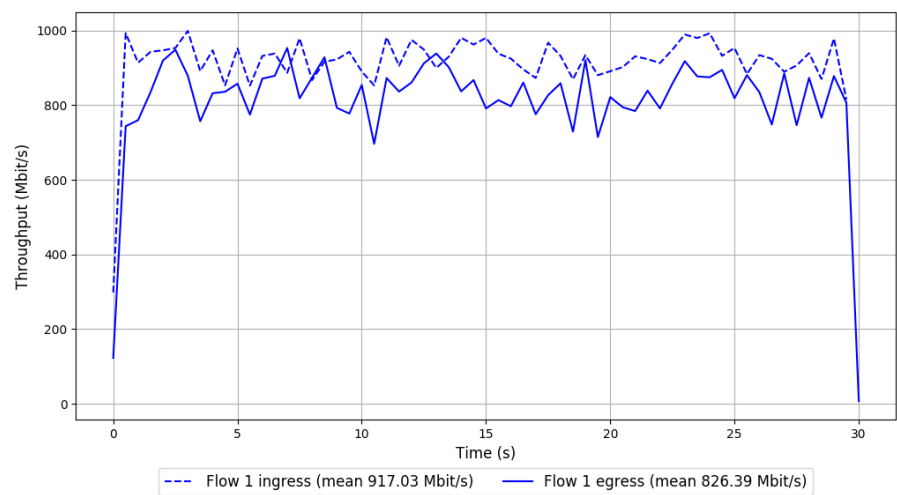
-- Flow 1:

Average throughput: 826.39 Mbit/s

95th percentile per-packet one-way delay: 299.286 ms

Loss rate: 9.88%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-13 06:08:38

End at: 2018-02-13 06:09:08

Below is generated by plot.py at 2018-02-13 10:31:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 857.98 Mbit/s

95th percentile per-packet one-way delay: 290.351 ms

Loss rate: 6.55%

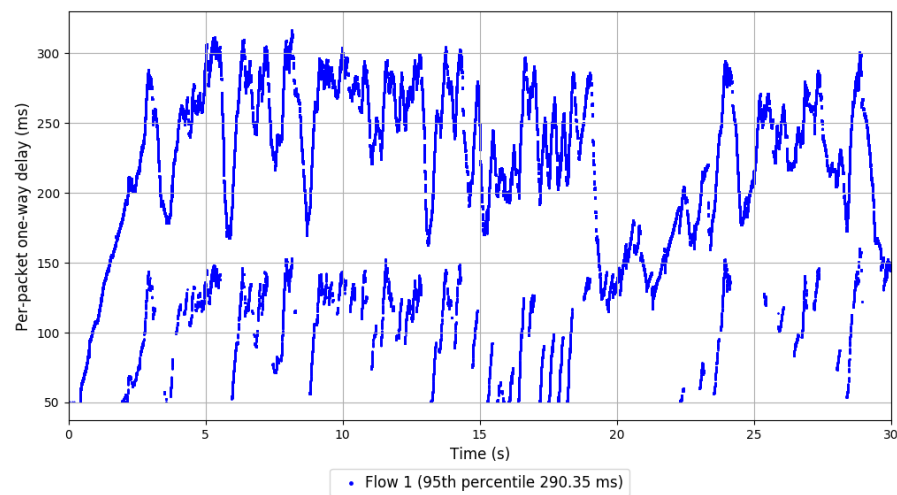
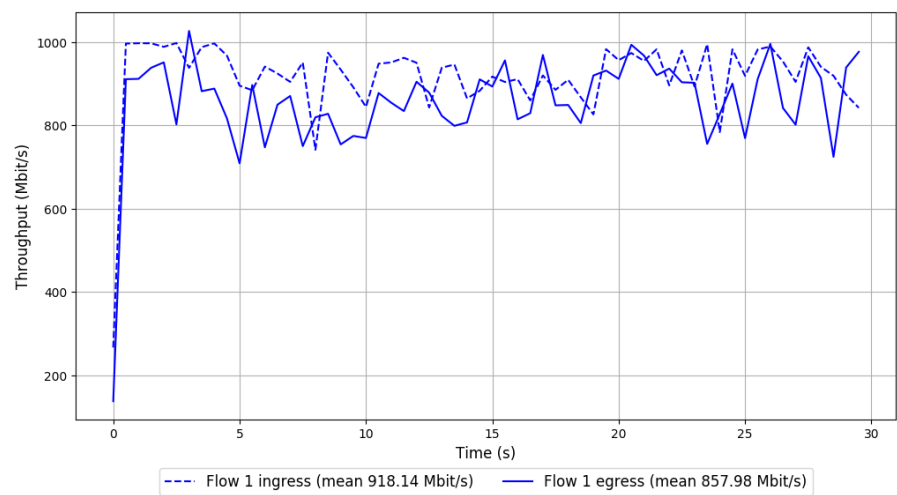
-- Flow 1:

Average throughput: 857.98 Mbit/s

95th percentile per-packet one-way delay: 290.351 ms

Loss rate: 6.55%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-13 06:23:22

End at: 2018-02-13 06:23:52

Below is generated by plot.py at 2018-02-13 10:32:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 866.91 Mbit/s

95th percentile per-packet one-way delay: 284.340 ms

Loss rate: 7.32%

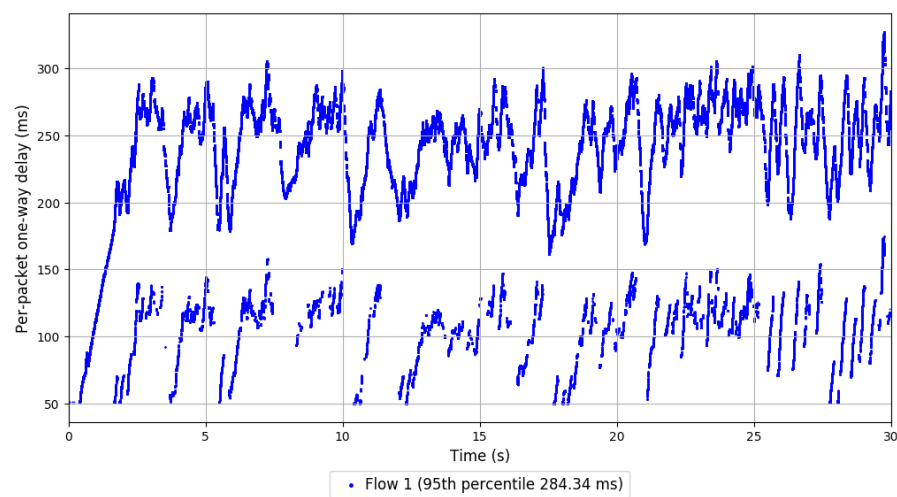
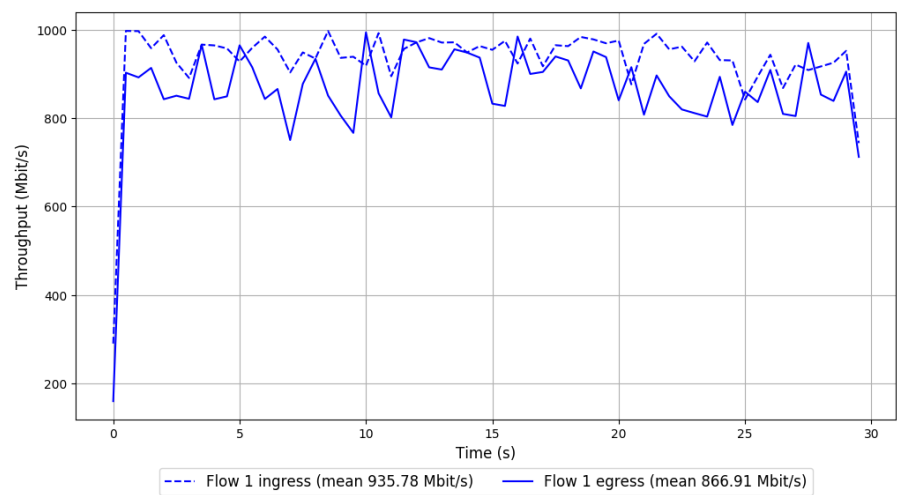
-- Flow 1:

Average throughput: 866.91 Mbit/s

95th percentile per-packet one-way delay: 284.340 ms

Loss rate: 7.32%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-13 06:37:47

End at: 2018-02-13 06:38:17

Below is generated by plot.py at 2018-02-13 10:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 875.84 Mbit/s

95th percentile per-packet one-way delay: 275.467 ms

Loss rate: 7.02%

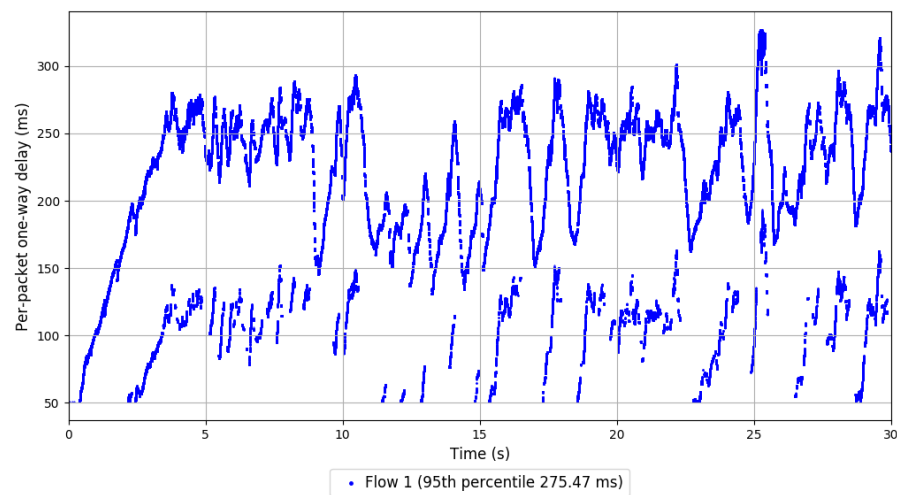
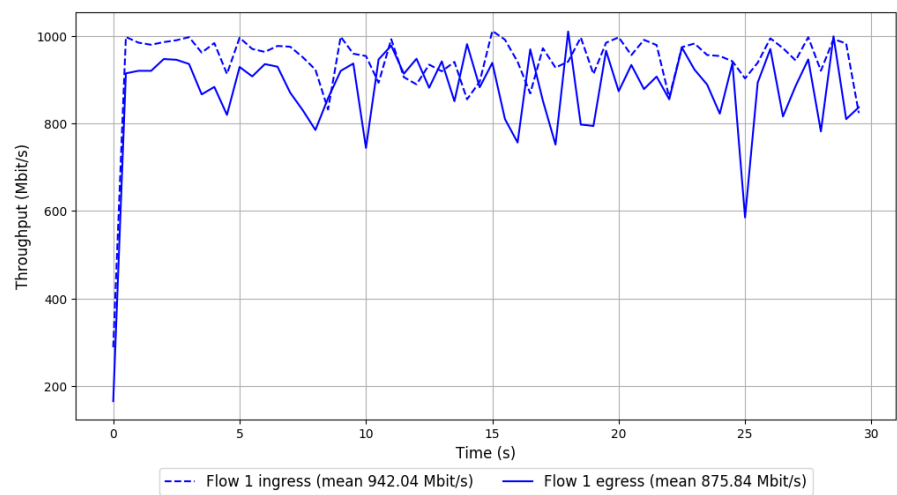
-- Flow 1:

Average throughput: 875.84 Mbit/s

95th percentile per-packet one-way delay: 275.467 ms

Loss rate: 7.02%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-13 06:52:18

End at: 2018-02-13 06:52:48

Below is generated by plot.py at 2018-02-13 10:32:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 879.82 Mbit/s

95th percentile per-packet one-way delay: 271.705 ms

Loss rate: 5.15%

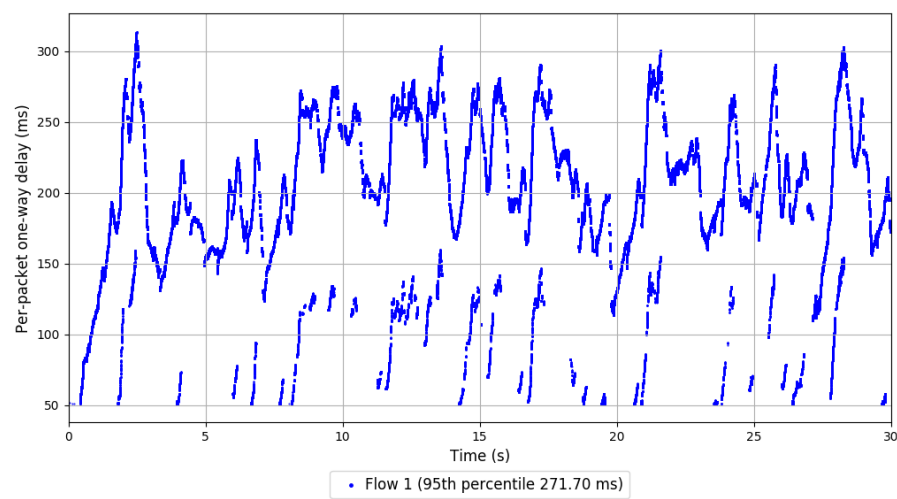
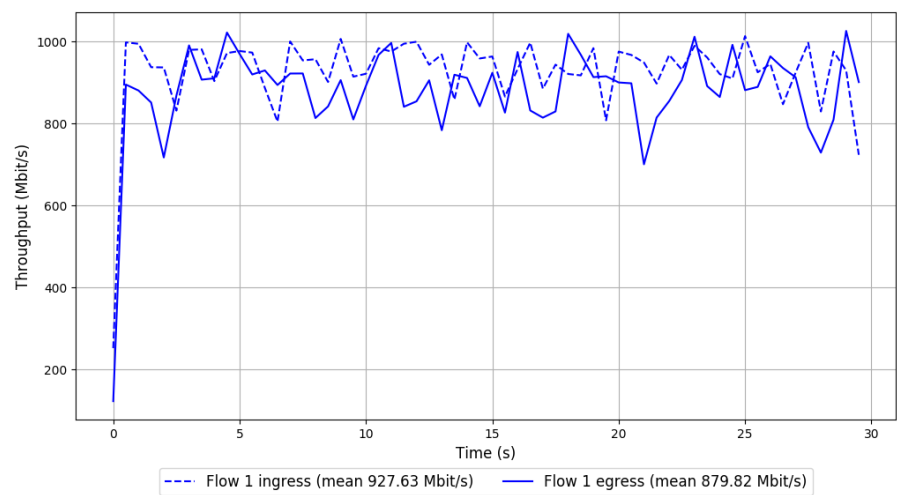
-- Flow 1:

Average throughput: 879.82 Mbit/s

95th percentile per-packet one-way delay: 271.705 ms

Loss rate: 5.15%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-13 07:06:45

End at: 2018-02-13 07:07:15

Below is generated by plot.py at 2018-02-13 10:32:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 838.48 Mbit/s

95th percentile per-packet one-way delay: 285.201 ms

Loss rate: 8.73%

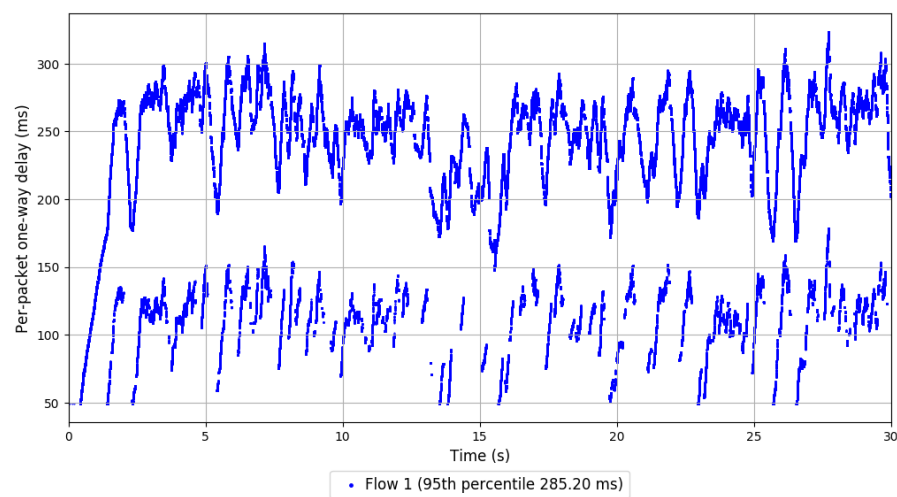
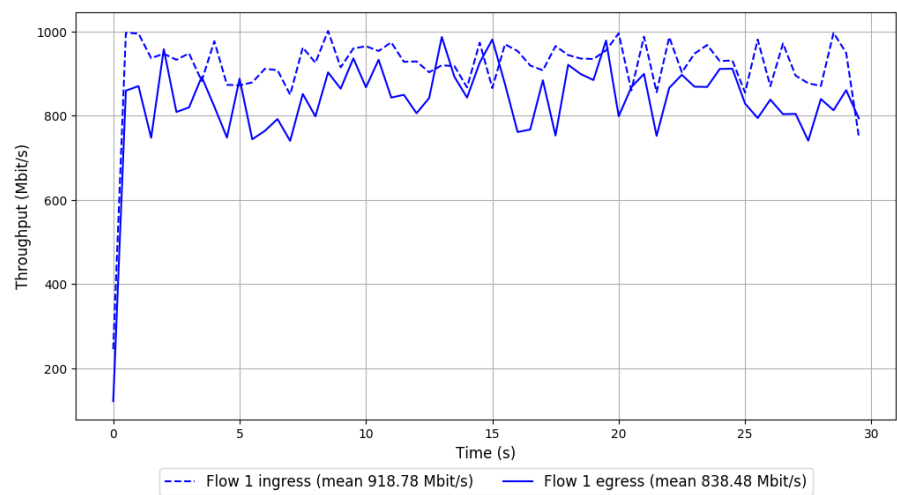
-- Flow 1:

Average throughput: 838.48 Mbit/s

95th percentile per-packet one-way delay: 285.201 ms

Loss rate: 8.73%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-13 07:21:07

End at: 2018-02-13 07:21:37

Below is generated by plot.py at 2018-02-13 10:33:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 796.33 Mbit/s

95th percentile per-packet one-way delay: 300.714 ms

Loss rate: 11.64%

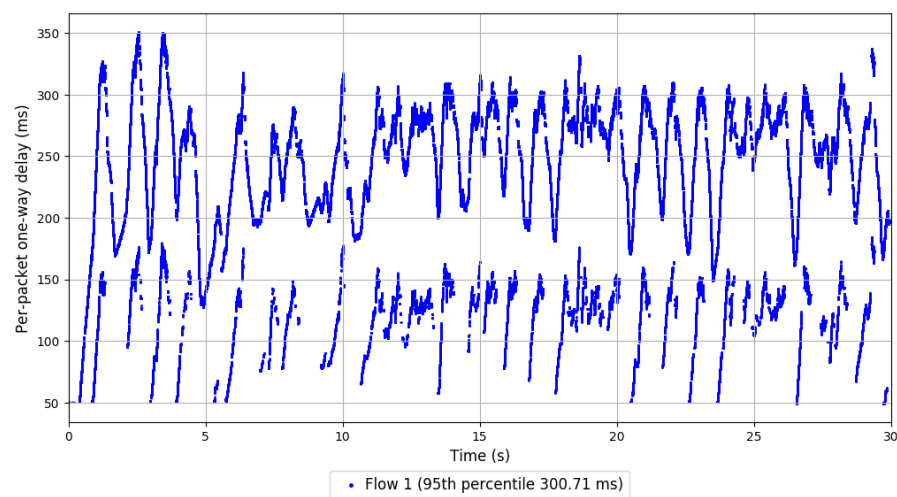
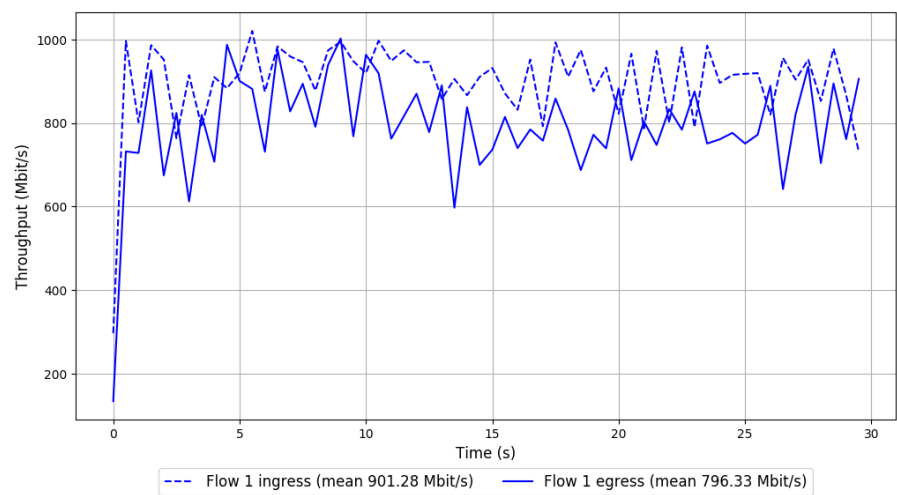
-- Flow 1:

Average throughput: 796.33 Mbit/s

95th percentile per-packet one-way delay: 300.714 ms

Loss rate: 11.64%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-13 07:35:36

End at: 2018-02-13 07:36:06

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 844.88 Mbit/s

95th percentile per-packet one-way delay: 285.125 ms

Loss rate: 8.84%

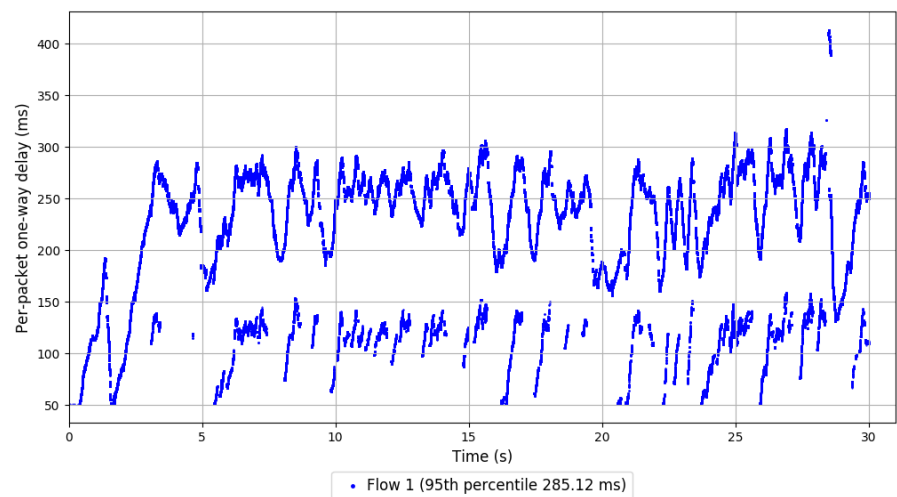
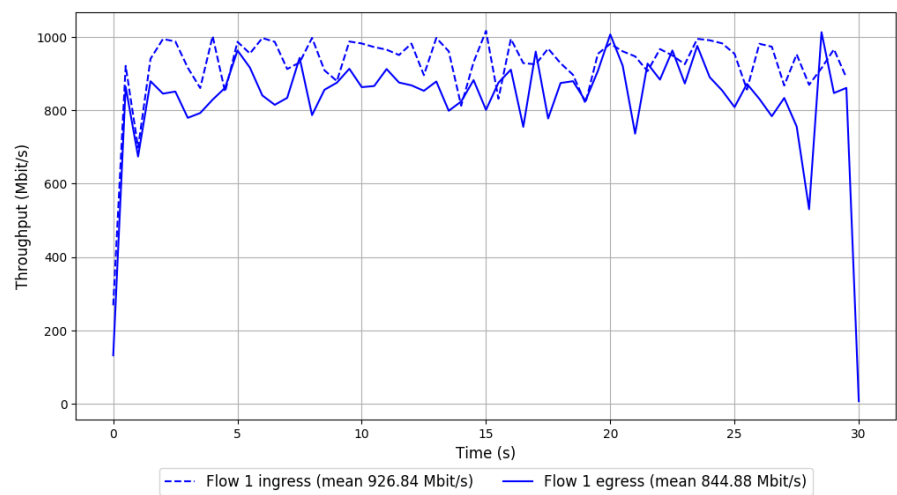
-- Flow 1:

Average throughput: 844.88 Mbit/s

95th percentile per-packet one-way delay: 285.125 ms

Loss rate: 8.84%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-13 07:50:12

End at: 2018-02-13 07:50:42

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 812.95 Mbit/s

95th percentile per-packet one-way delay: 298.581 ms

Loss rate: 10.99%

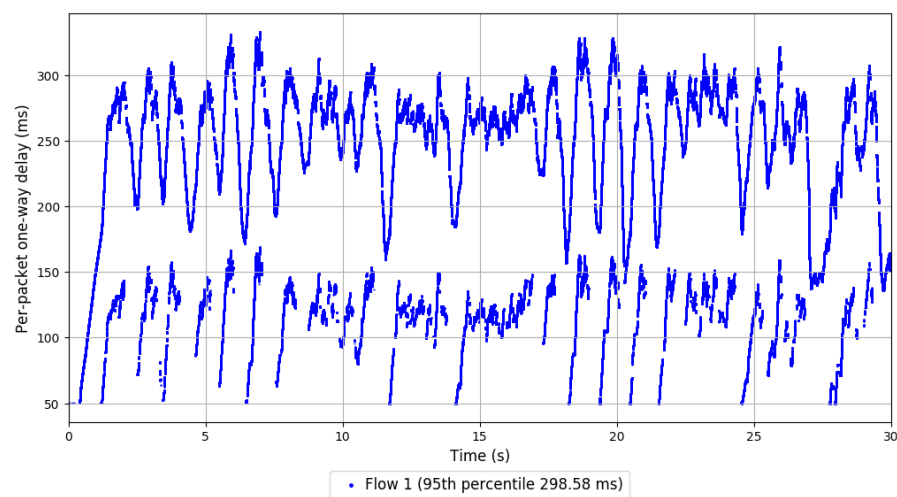
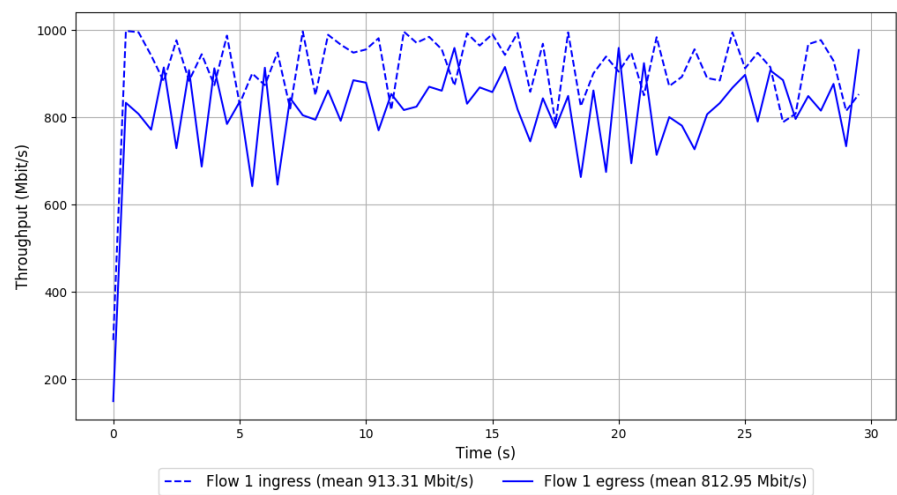
-- Flow 1:

Average throughput: 812.95 Mbit/s

95th percentile per-packet one-way delay: 298.581 ms

Loss rate: 10.99%

Run 10: Report of FillP — Data Link

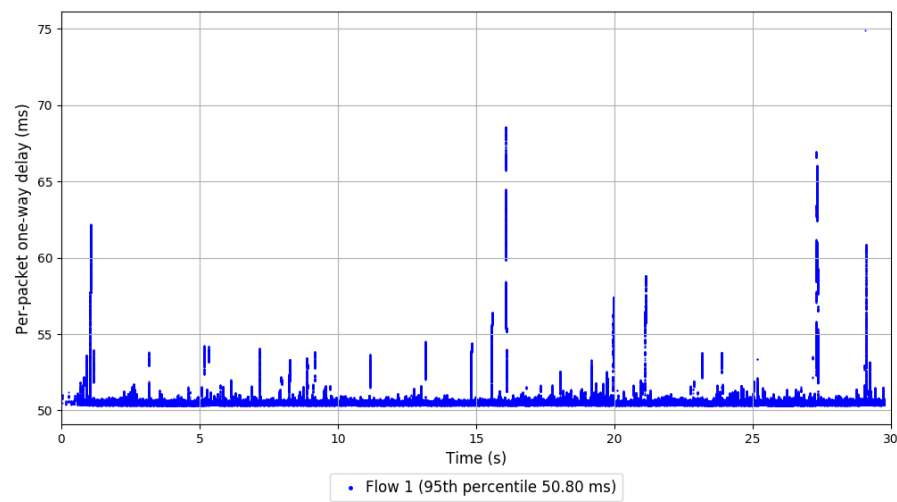
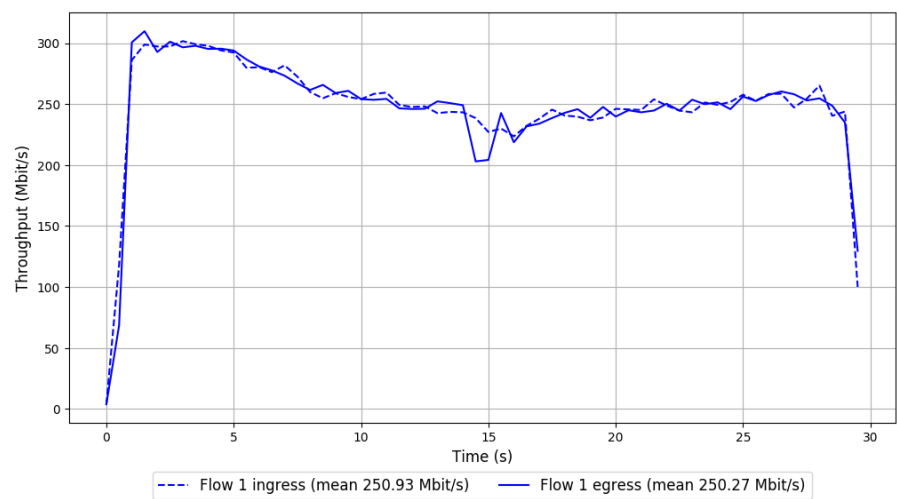


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-13 05:36:22
End at: 2018-02-13 05:36:52

# Below is generated by plot.py at 2018-02-13 10:45:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.27 Mbit/s
95th percentile per-packet one-way delay: 50.796 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 250.27 Mbit/s
95th percentile per-packet one-way delay: 50.796 ms
Loss rate: 0.26%
```

Run 1: Report of Indigo-1-32 — Data Link

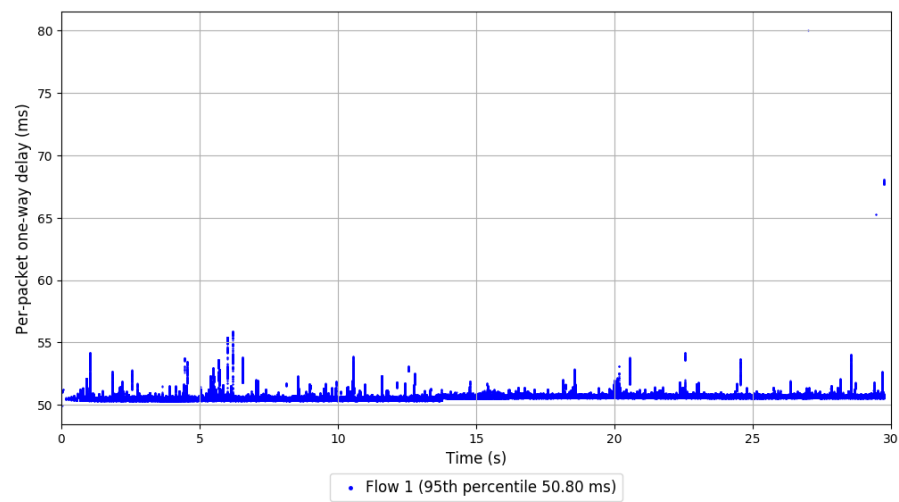
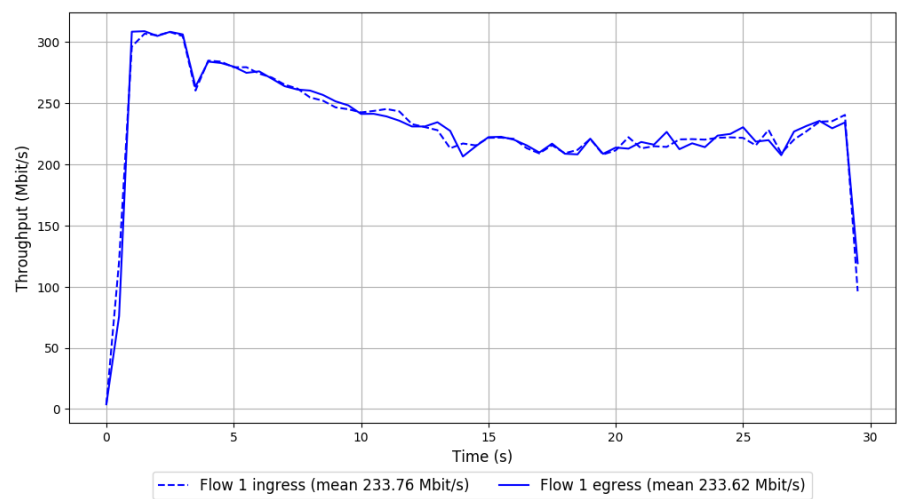


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-13 05:51:09
End at: 2018-02-13 05:51:39

# Below is generated by plot.py at 2018-02-13 10:45:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.62 Mbit/s
95th percentile per-packet one-way delay: 50.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 233.62 Mbit/s
95th percentile per-packet one-way delay: 50.799 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-13 06:06:00

End at: 2018-02-13 06:06:30

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.21 Mbit/s

95th percentile per-packet one-way delay: 50.930 ms

Loss rate: 0.15%

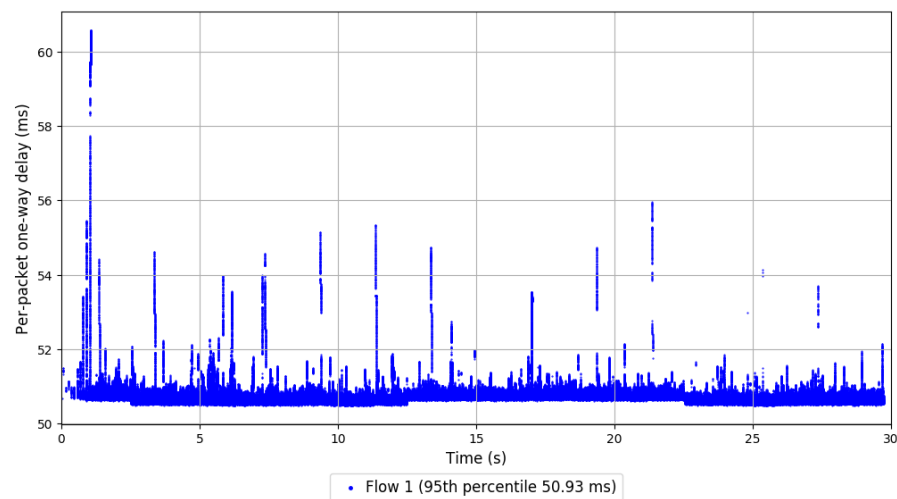
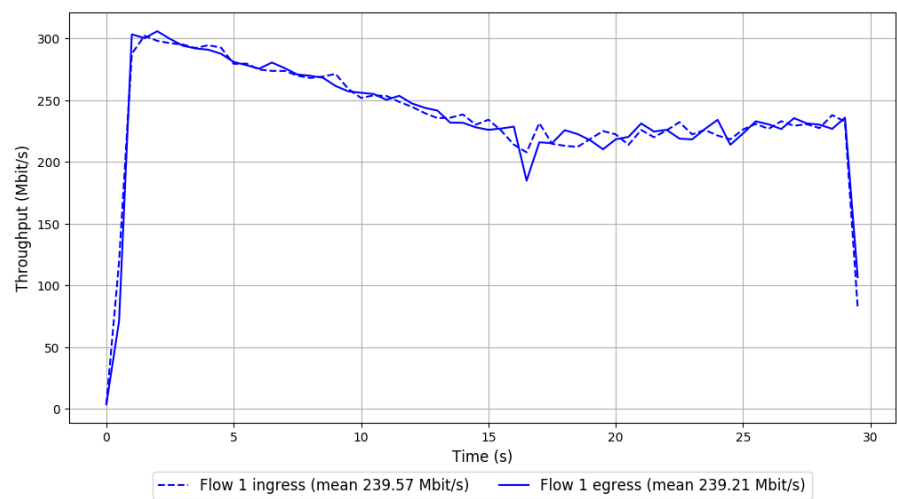
-- Flow 1:

Average throughput: 239.21 Mbit/s

95th percentile per-packet one-way delay: 50.930 ms

Loss rate: 0.15%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-13 06:20:41

End at: 2018-02-13 06:21:11

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.46 Mbit/s

95th percentile per-packet one-way delay: 51.335 ms

Loss rate: 0.00%

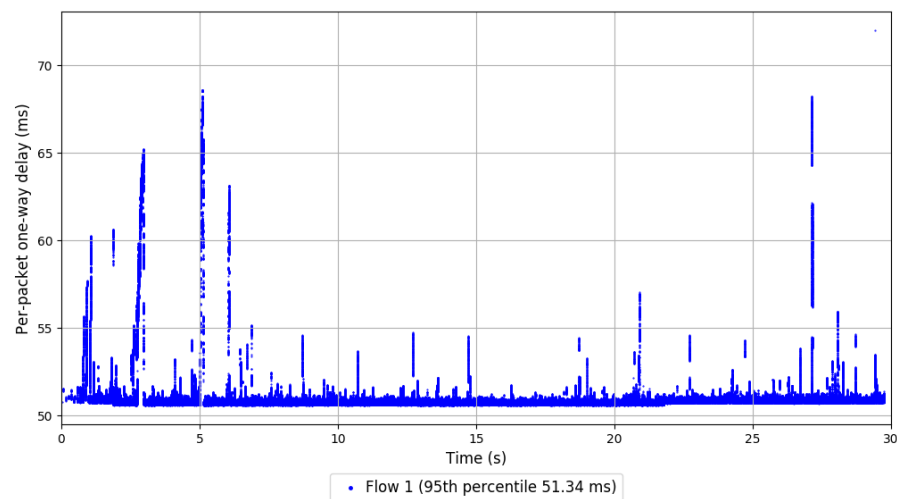
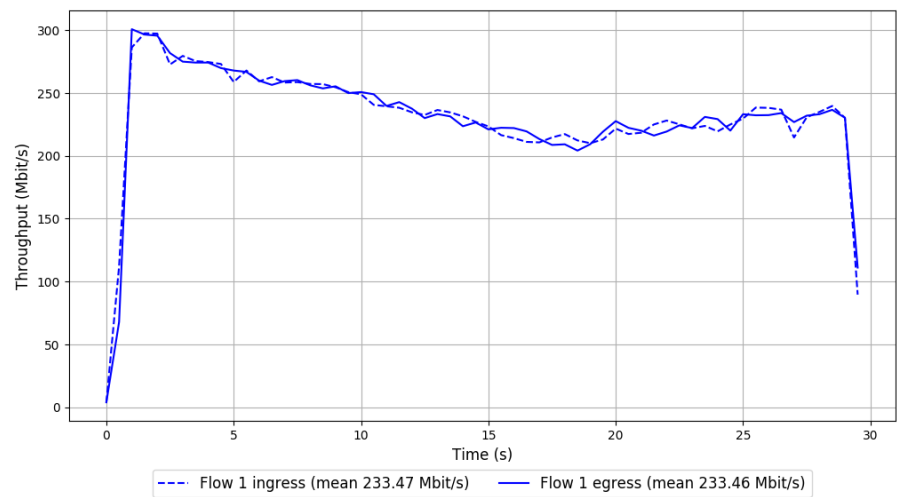
-- Flow 1:

Average throughput: 233.46 Mbit/s

95th percentile per-packet one-way delay: 51.335 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-13 06:35:11

End at: 2018-02-13 06:35:41

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.85 Mbit/s

95th percentile per-packet one-way delay: 51.101 ms

Loss rate: 0.18%

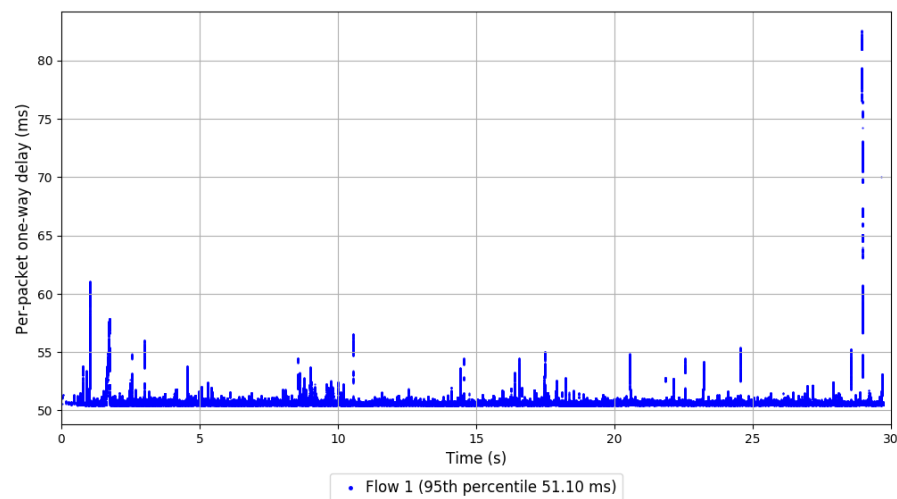
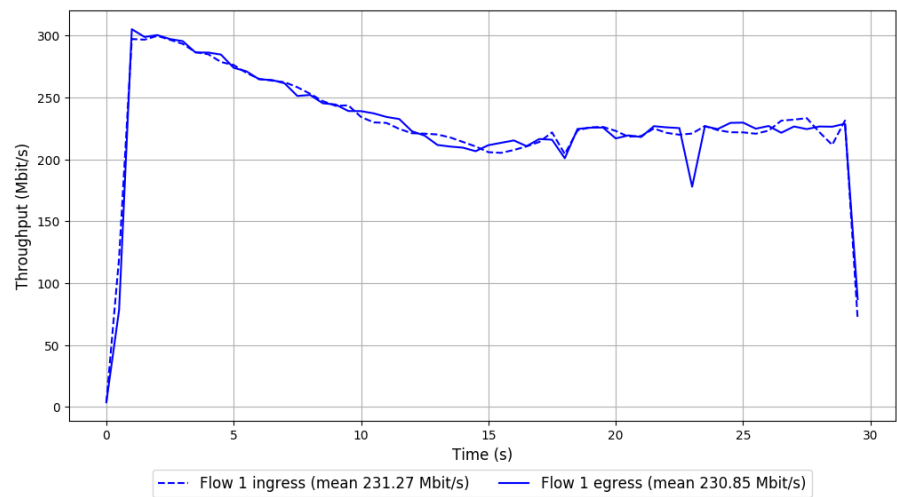
-- Flow 1:

Average throughput: 230.85 Mbit/s

95th percentile per-packet one-way delay: 51.101 ms

Loss rate: 0.18%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-13 06:49:38

End at: 2018-02-13 06:50:08

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.18 Mbit/s

95th percentile per-packet one-way delay: 51.321 ms

Loss rate: 0.00%

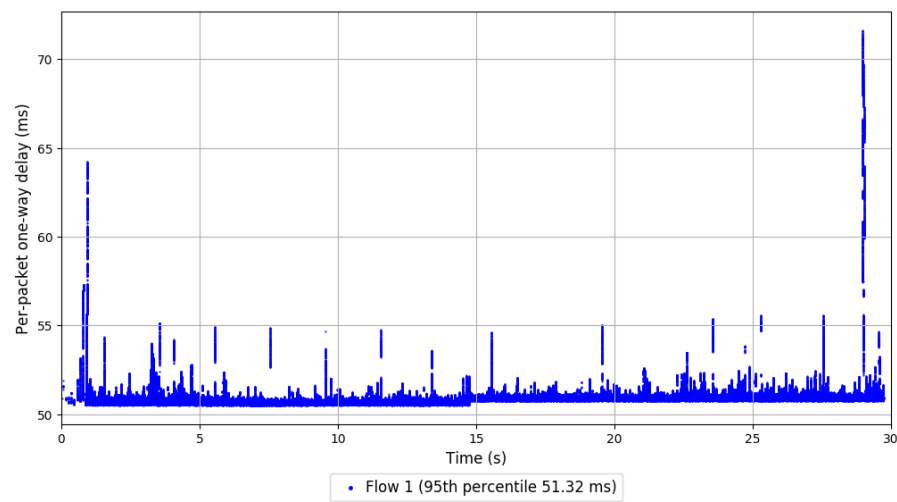
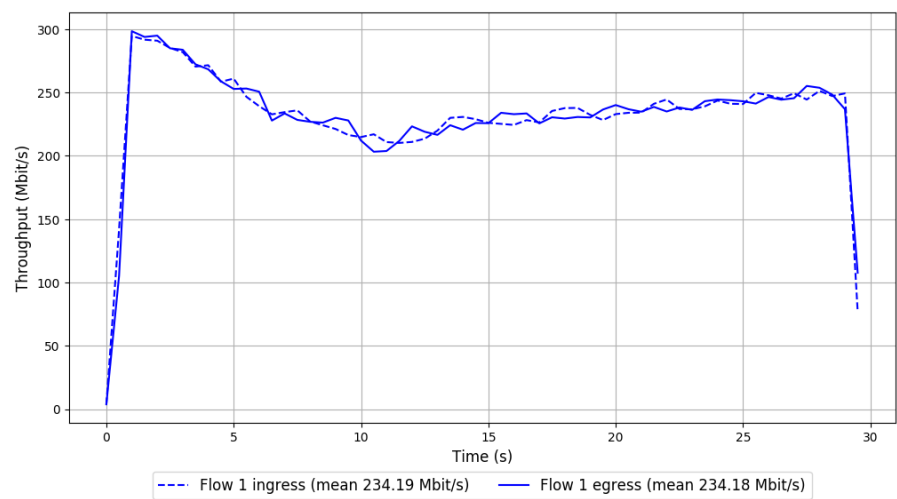
-- Flow 1:

Average throughput: 234.18 Mbit/s

95th percentile per-packet one-way delay: 51.321 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-13 07:04:07

End at: 2018-02-13 07:04:37

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.06 Mbit/s

95th percentile per-packet one-way delay: 51.031 ms

Loss rate: 0.54%

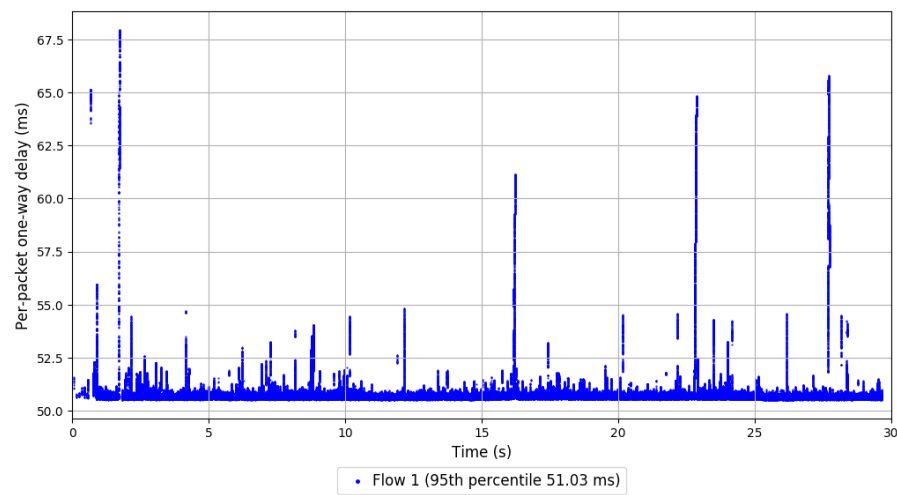
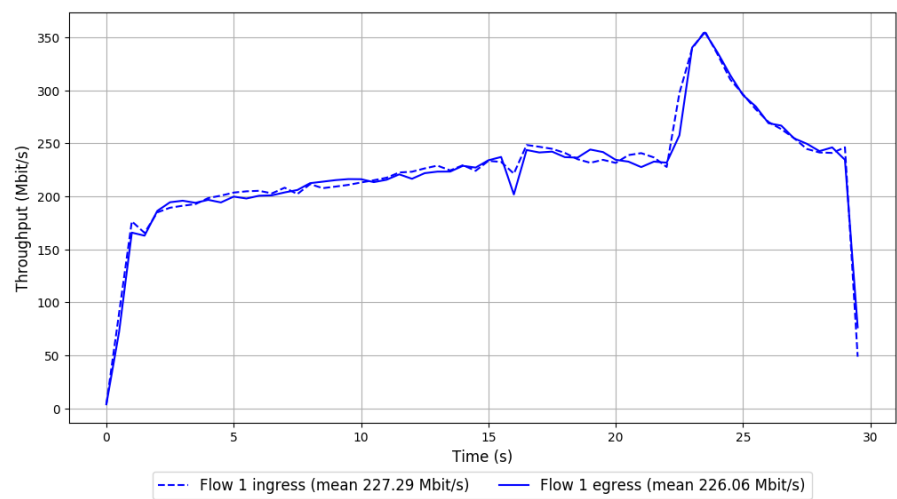
-- Flow 1:

Average throughput: 226.06 Mbit/s

95th percentile per-packet one-way delay: 51.031 ms

Loss rate: 0.54%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-13 07:18:32

End at: 2018-02-13 07:19:02

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.29 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 0.00%

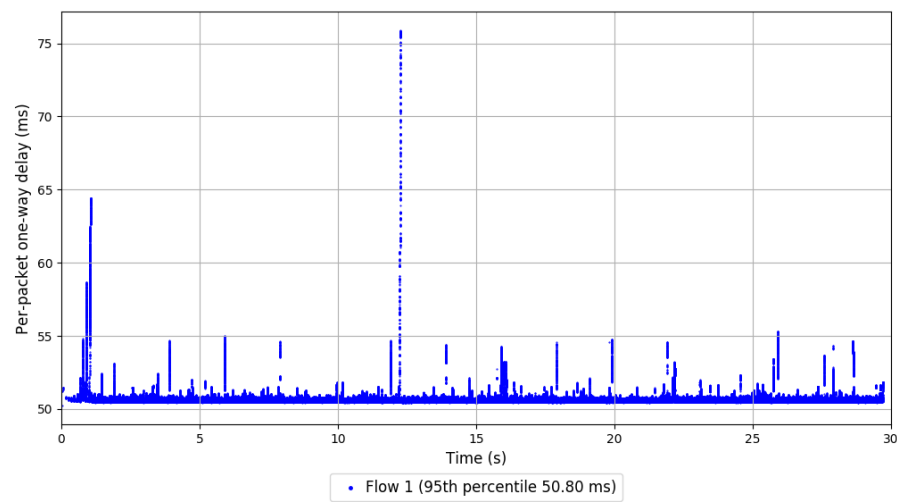
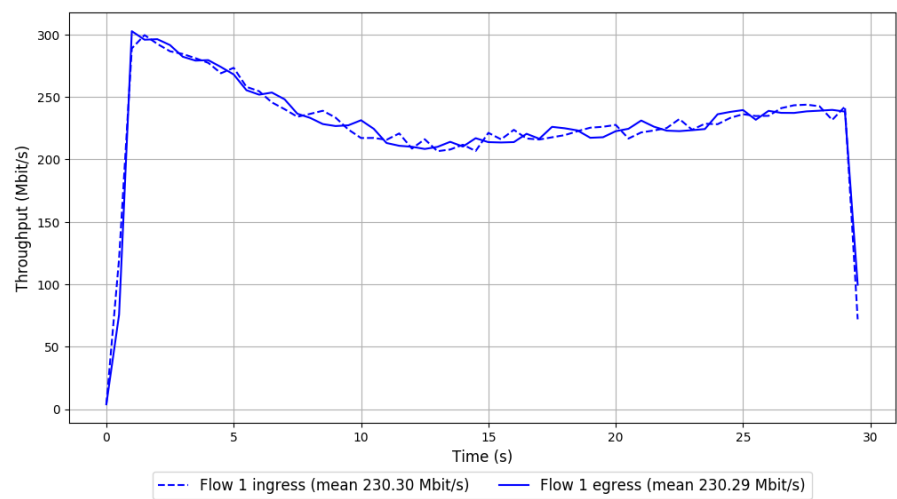
-- Flow 1:

Average throughput: 230.29 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-13 07:32:59

End at: 2018-02-13 07:33:29

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 251.16 Mbit/s

95th percentile per-packet one-way delay: 51.462 ms

Loss rate: 0.00%

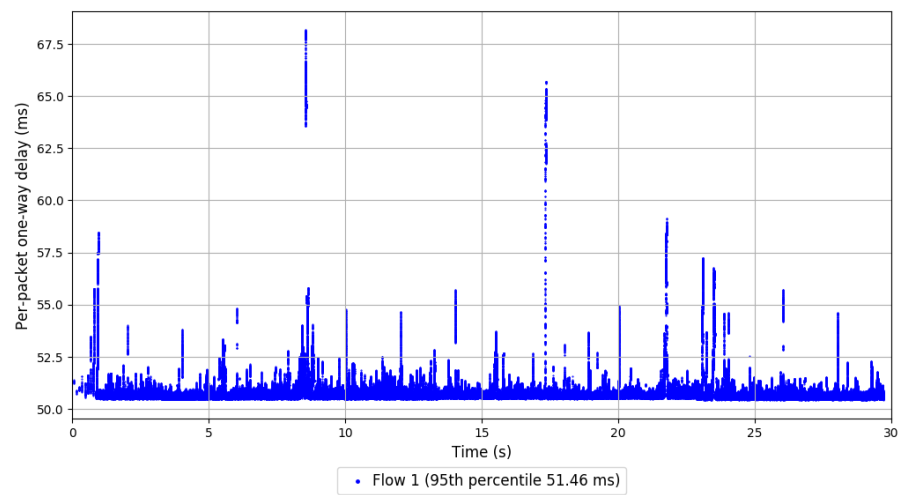
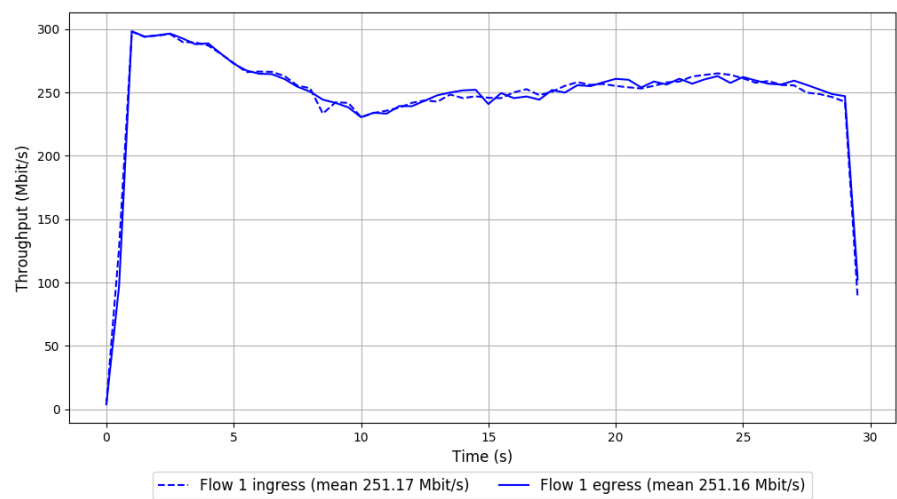
-- Flow 1:

Average throughput: 251.16 Mbit/s

95th percentile per-packet one-way delay: 51.462 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-13 07:47:35

End at: 2018-02-13 07:48:05

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.13 Mbit/s

95th percentile per-packet one-way delay: 51.020 ms

Loss rate: 0.44%

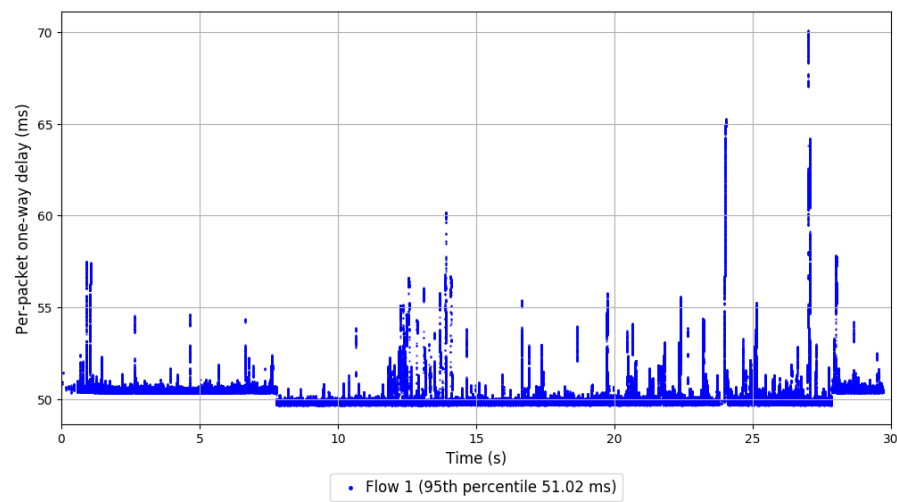
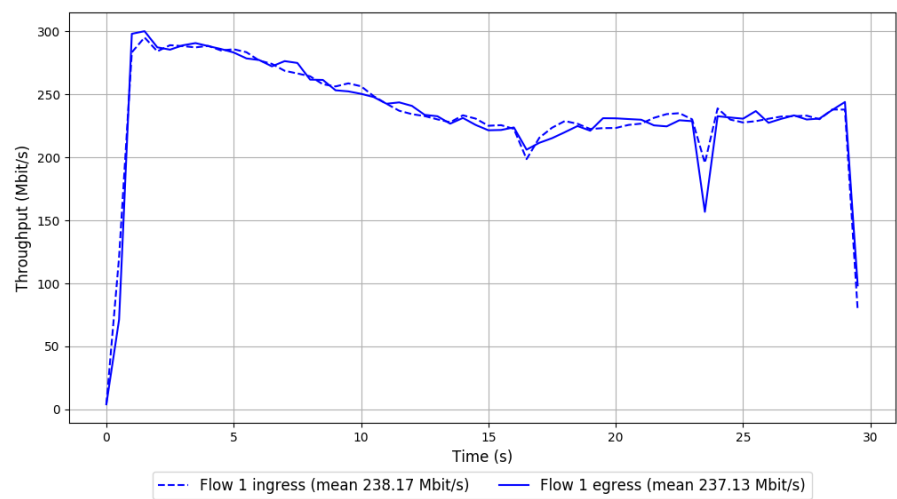
-- Flow 1:

Average throughput: 237.13 Mbit/s

95th percentile per-packet one-way delay: 51.020 ms

Loss rate: 0.44%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-13 05:38:01

End at: 2018-02-13 05:38:31

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 442.31 Mbit/s

95th percentile per-packet one-way delay: 57.807 ms

Loss rate: 0.02%

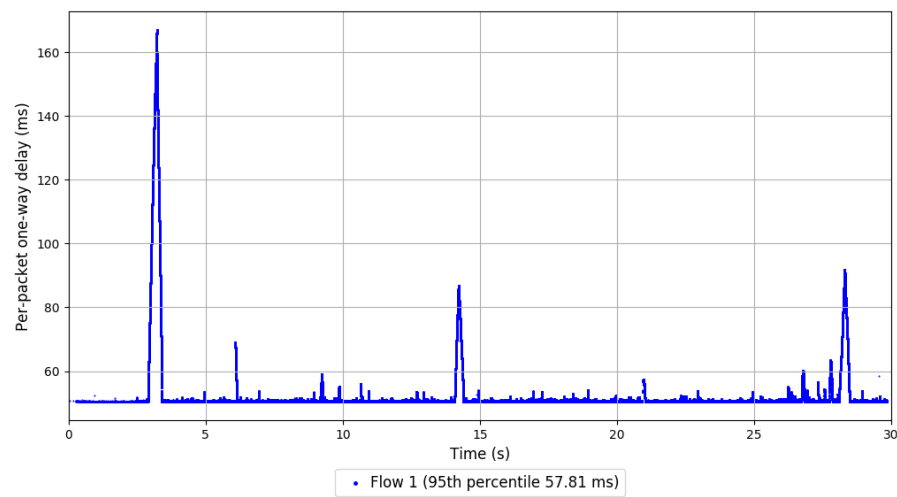
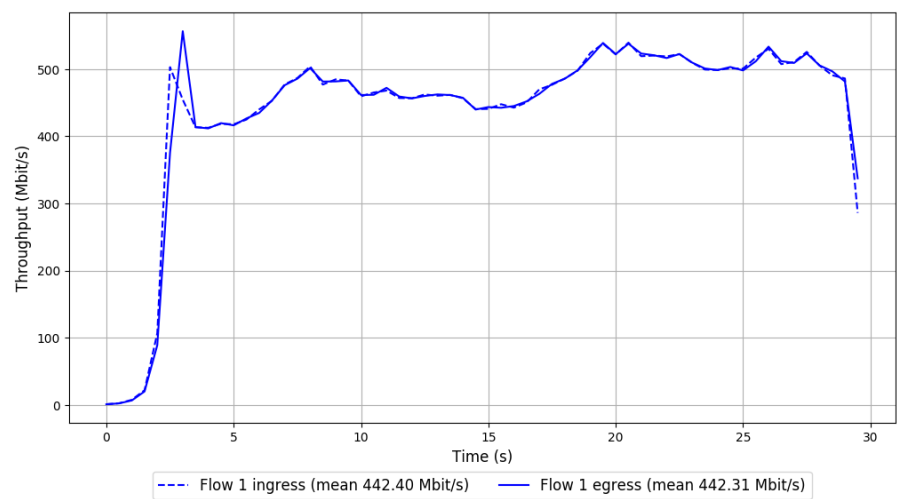
-- Flow 1:

Average throughput: 442.31 Mbit/s

95th percentile per-packet one-way delay: 57.807 ms

Loss rate: 0.02%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-13 05:52:46

End at: 2018-02-13 05:53:16

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 451.96 Mbit/s

95th percentile per-packet one-way delay: 63.938 ms

Loss rate: 0.07%

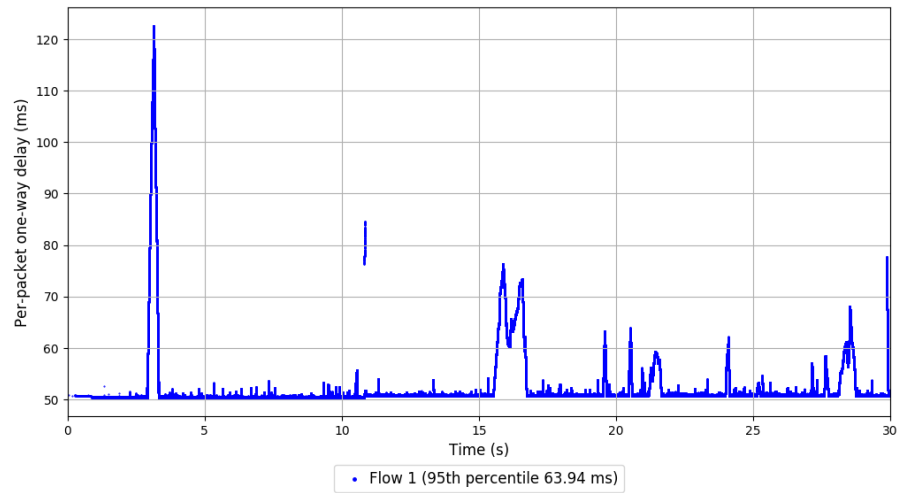
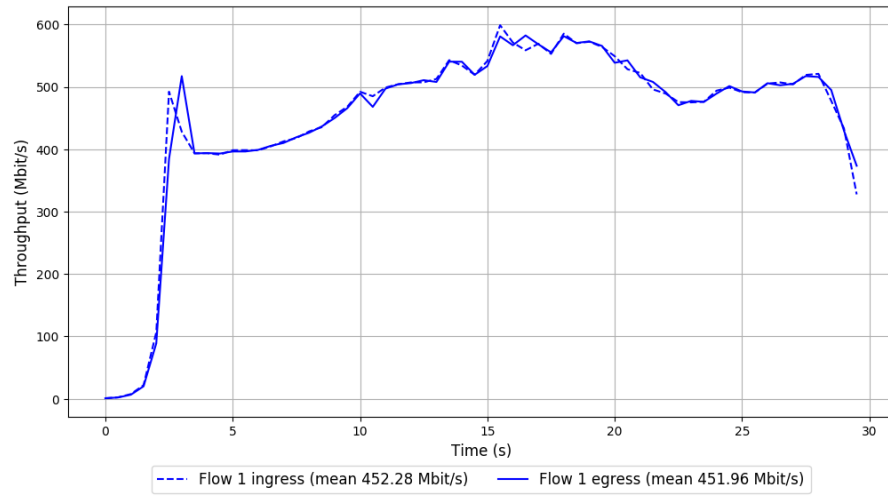
-- Flow 1:

Average throughput: 451.96 Mbit/s

95th percentile per-packet one-way delay: 63.938 ms

Loss rate: 0.07%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-13 06:07:38

End at: 2018-02-13 06:08:08

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 361.98 Mbit/s

95th percentile per-packet one-way delay: 53.869 ms

Loss rate: 0.16%

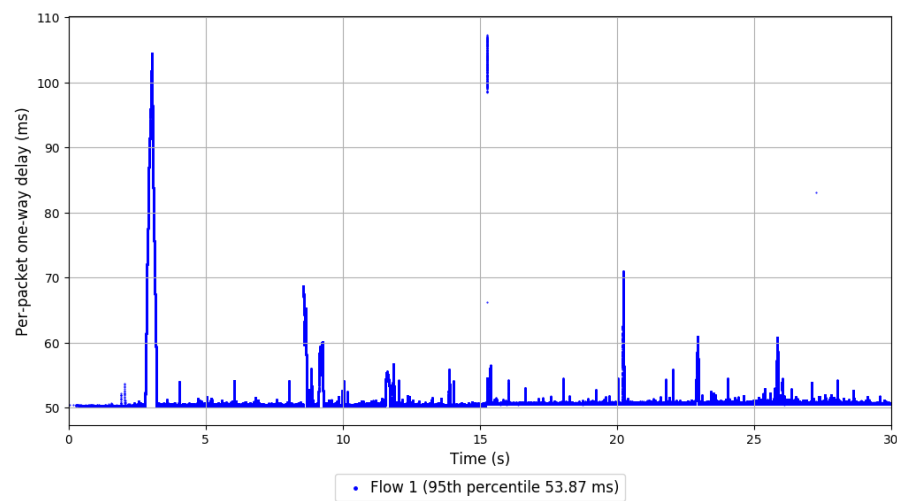
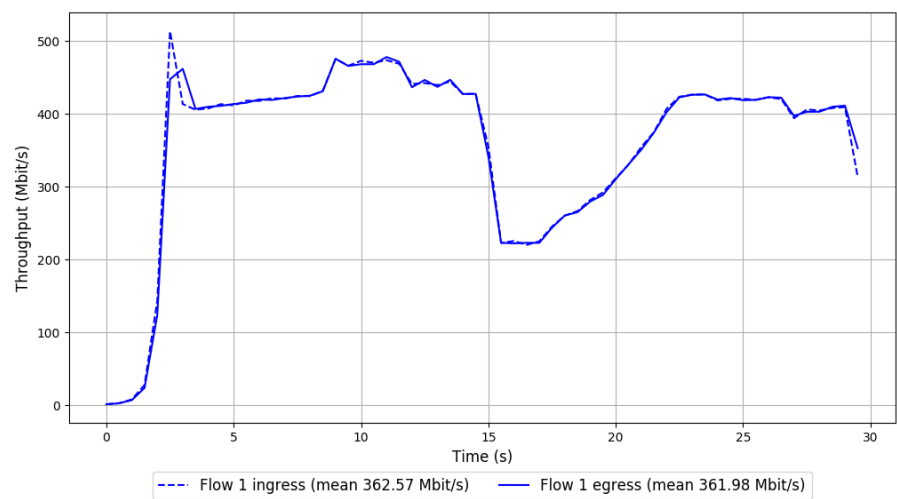
-- Flow 1:

Average throughput: 361.98 Mbit/s

95th percentile per-packet one-way delay: 53.869 ms

Loss rate: 0.16%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-13 06:22:18

End at: 2018-02-13 06:22:48

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 413.11 Mbit/s

95th percentile per-packet one-way delay: 76.405 ms

Loss rate: 0.00%

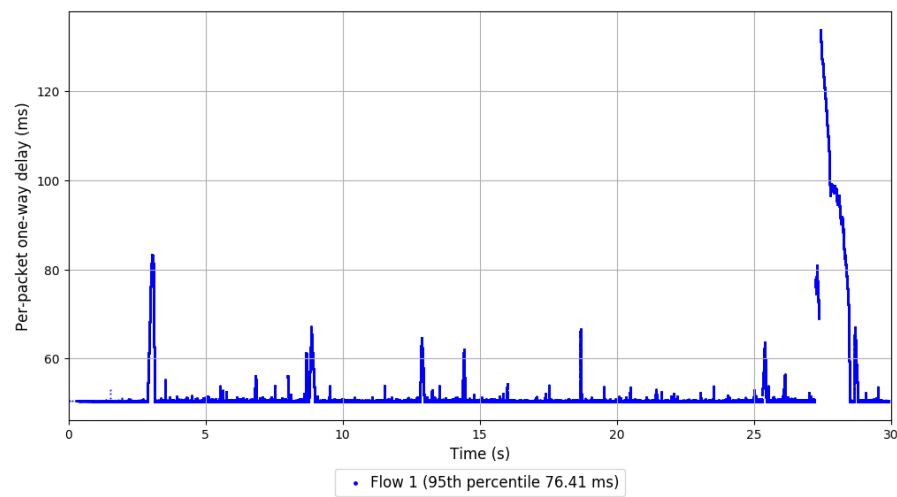
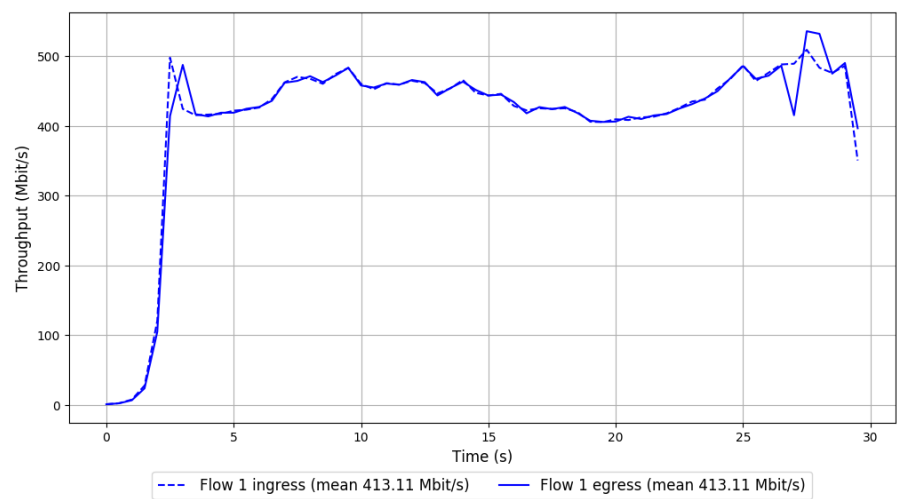
-- Flow 1:

Average throughput: 413.11 Mbit/s

95th percentile per-packet one-way delay: 76.405 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-13 06:36:48

End at: 2018-02-13 06:37:18

Below is generated by plot.py at 2018-02-13 10:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 362.77 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.15%

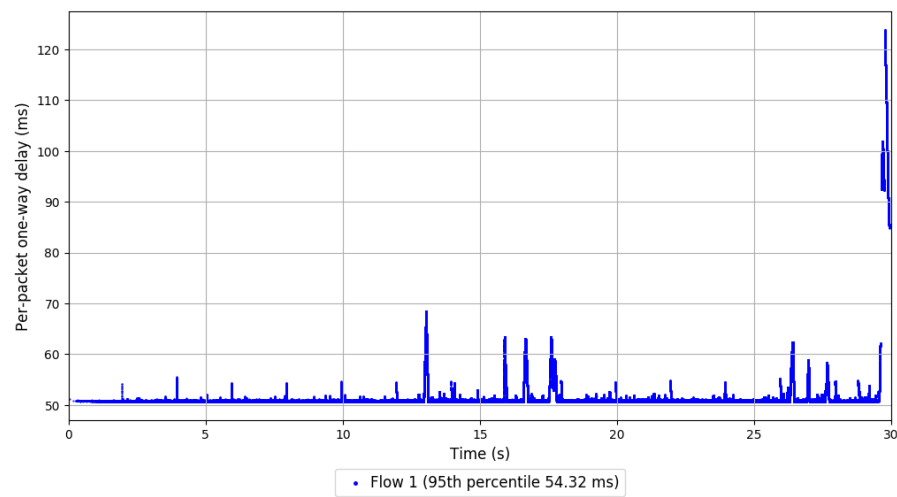
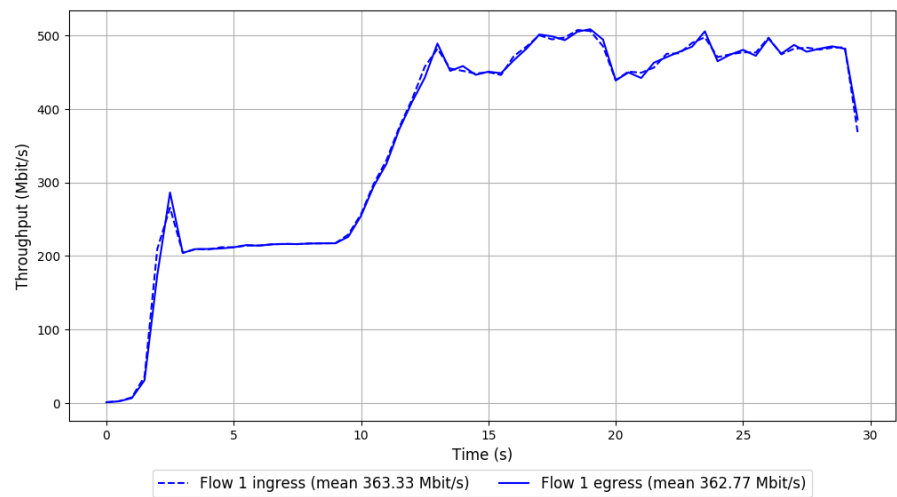
-- Flow 1:

Average throughput: 362.77 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.15%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-13 06:51:15

End at: 2018-02-13 06:51:45

Below is generated by plot.py at 2018-02-13 10:46:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 410.43 Mbit/s

95th percentile per-packet one-way delay: 78.303 ms

Loss rate: 0.03%

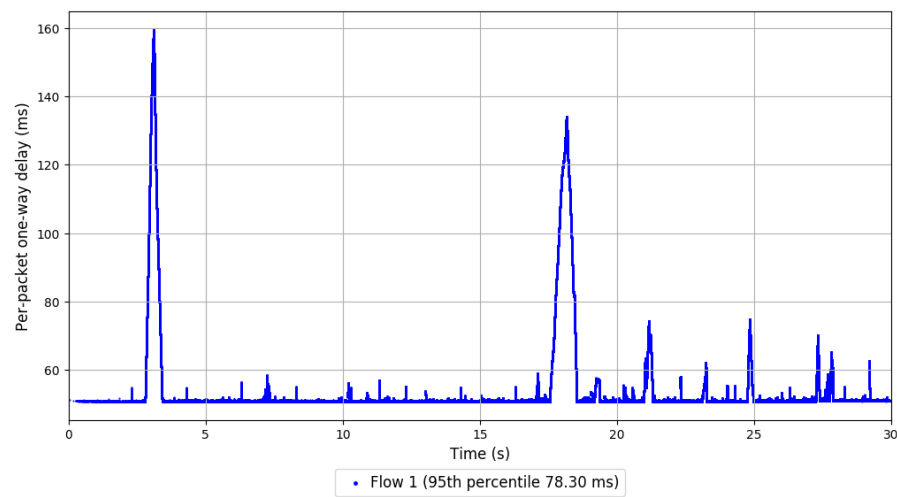
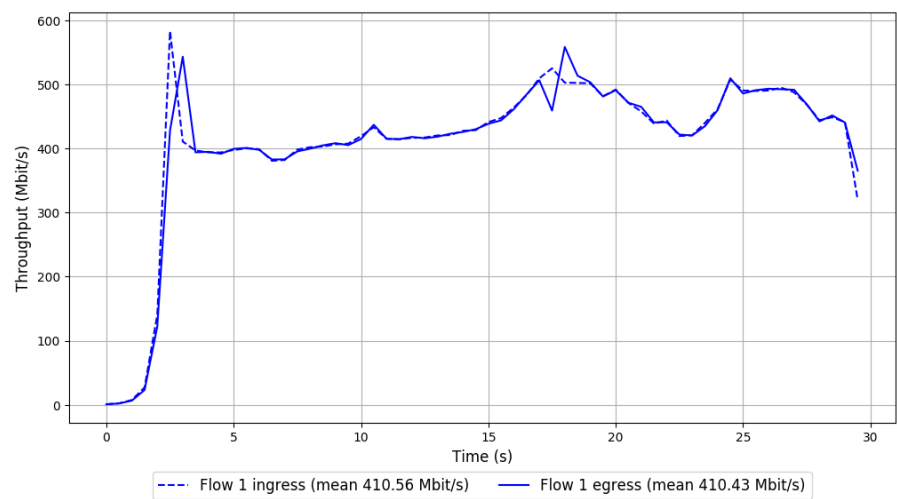
-- Flow 1:

Average throughput: 410.43 Mbit/s

95th percentile per-packet one-way delay: 78.303 ms

Loss rate: 0.03%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-13 07:05:45

End at: 2018-02-13 07:06:15

Below is generated by plot.py at 2018-02-13 10:48:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 366.59 Mbit/s

95th percentile per-packet one-way delay: 66.698 ms

Loss rate: 0.00%

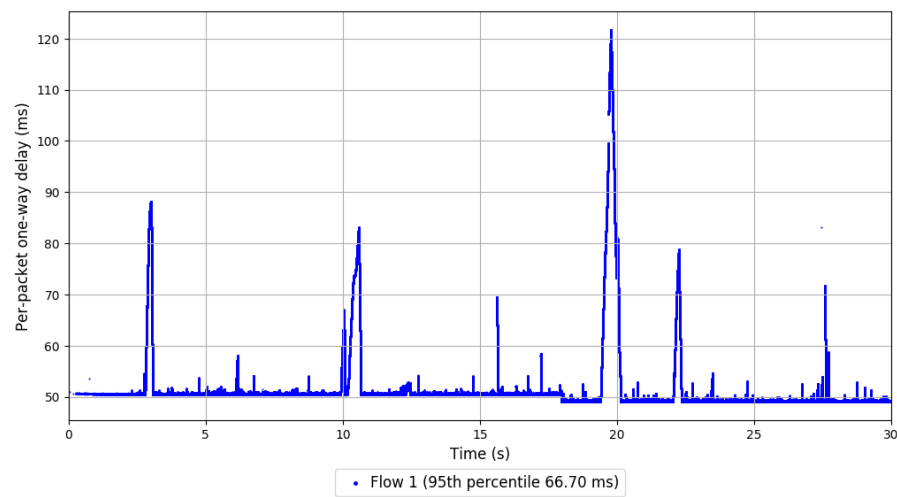
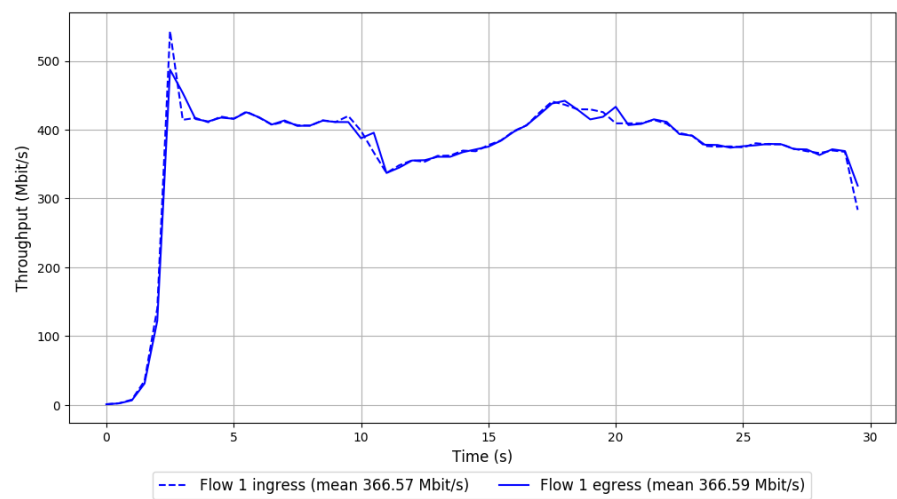
-- Flow 1:

Average throughput: 366.59 Mbit/s

95th percentile per-packet one-way delay: 66.698 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-13 07:20:09

End at: 2018-02-13 07:20:39

Below is generated by plot.py at 2018-02-13 10:49:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.75 Mbit/s

95th percentile per-packet one-way delay: 66.023 ms

Loss rate: 0.00%

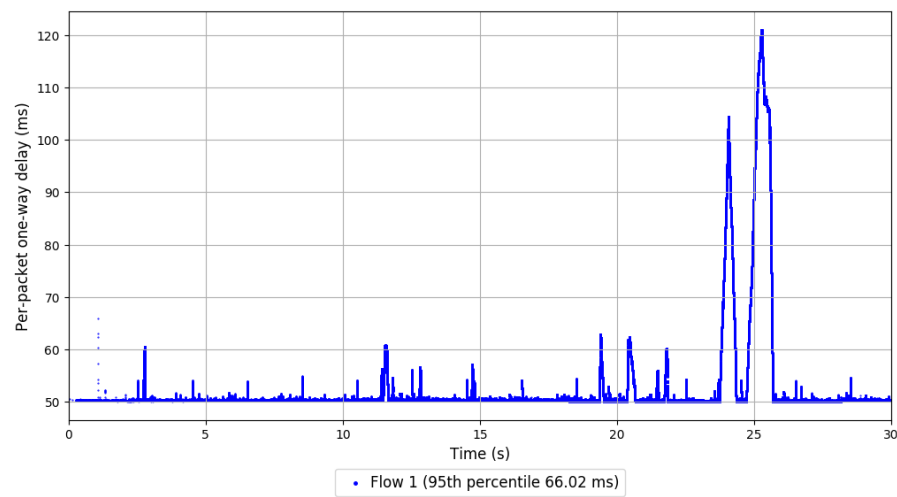
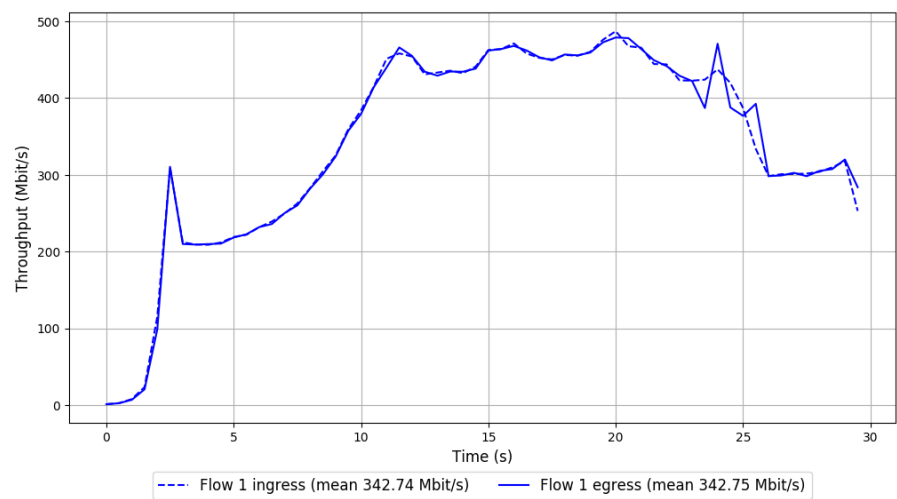
-- Flow 1:

Average throughput: 342.75 Mbit/s

95th percentile per-packet one-way delay: 66.023 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-13 07:34:37

End at: 2018-02-13 07:35:07

Below is generated by plot.py at 2018-02-13 10:50:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 339.30 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.15%

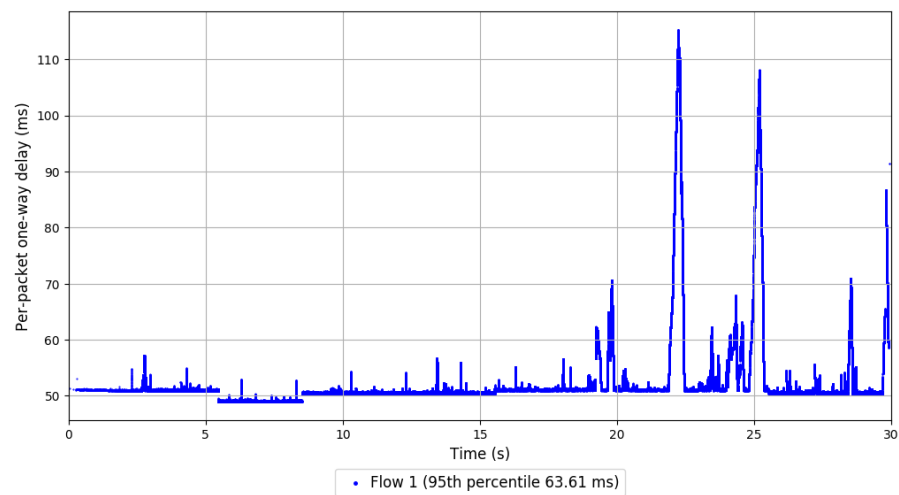
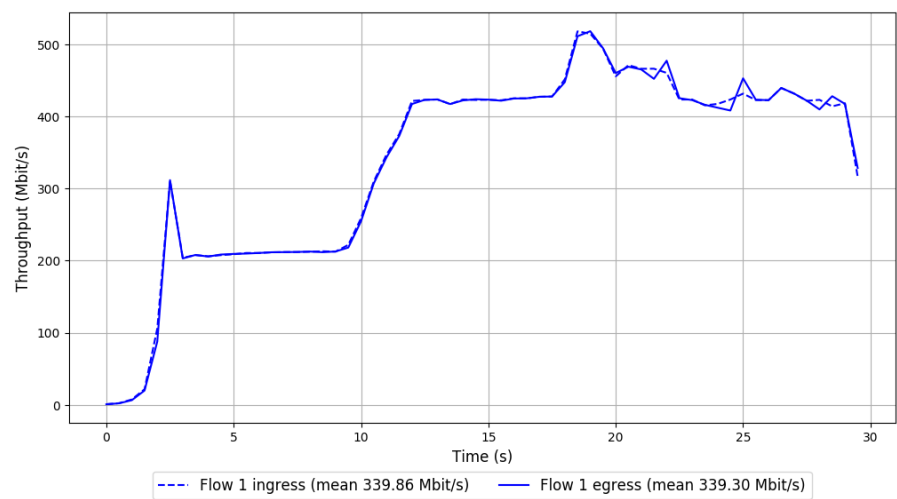
-- Flow 1:

Average throughput: 339.30 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.15%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-13 07:49:12

End at: 2018-02-13 07:49:42

Below is generated by plot.py at 2018-02-13 10:50:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 368.37 Mbit/s

95th percentile per-packet one-way delay: 76.208 ms

Loss rate: 0.00%

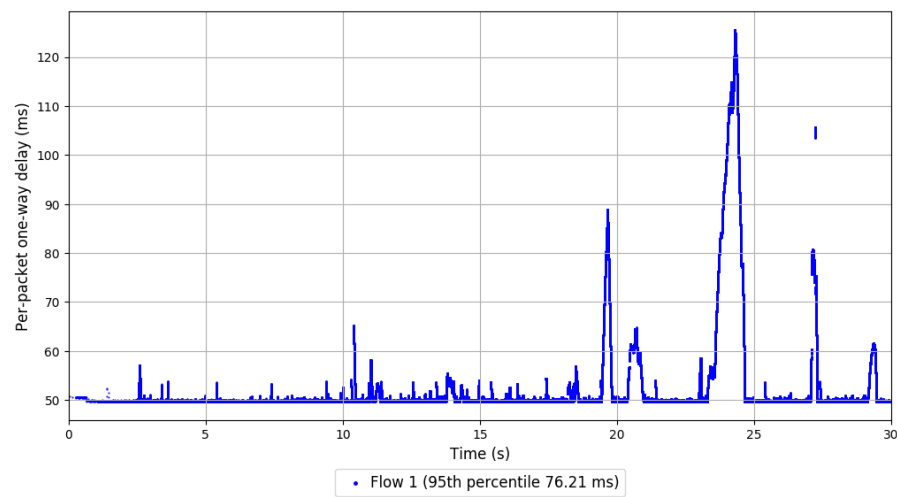
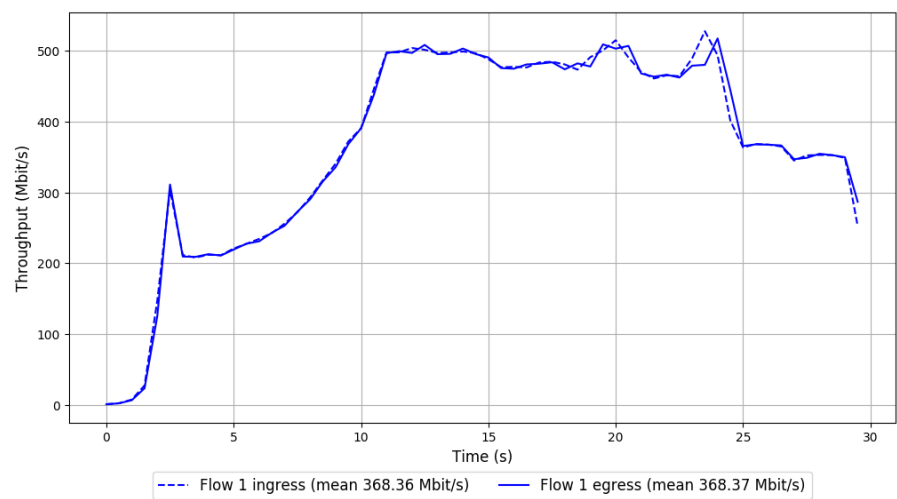
-- Flow 1:

Average throughput: 368.37 Mbit/s

95th percentile per-packet one-way delay: 76.208 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

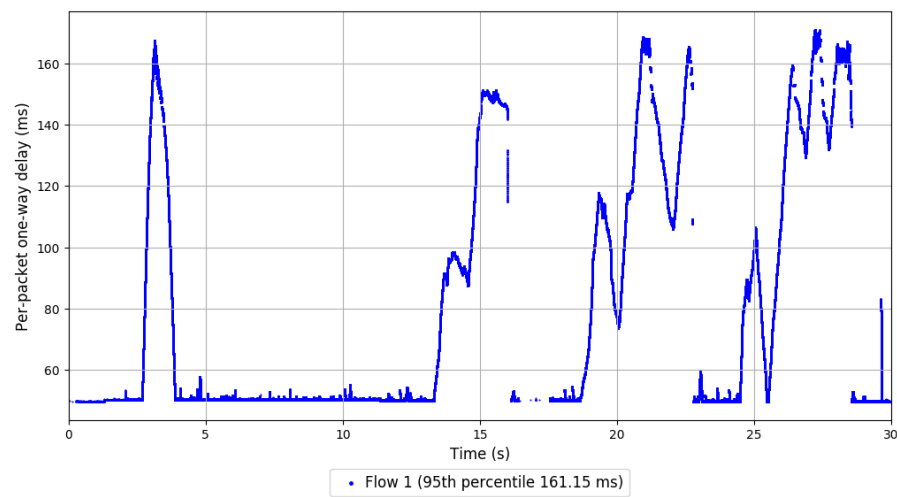
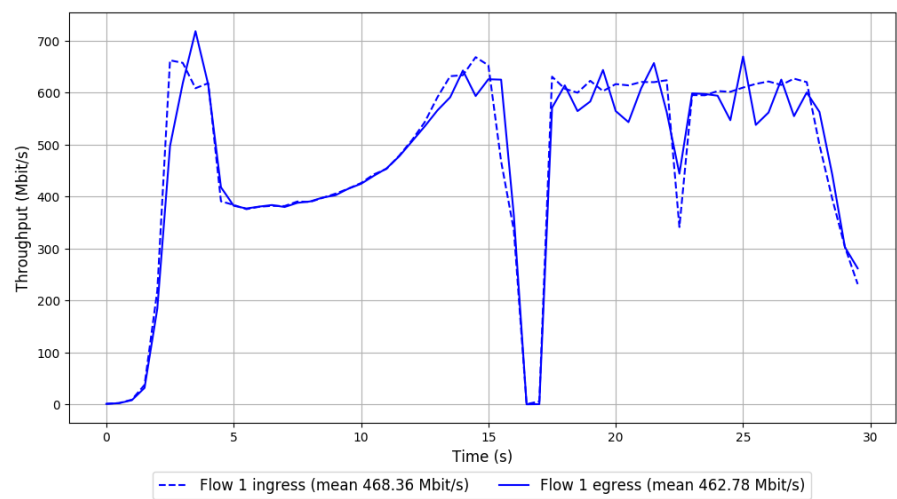


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-13 05:43:22
End at: 2018-02-13 05:43:52

# Below is generated by plot.py at 2018-02-13 10:52:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 462.78 Mbit/s
95th percentile per-packet one-way delay: 161.153 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 462.78 Mbit/s
95th percentile per-packet one-way delay: 161.153 ms
Loss rate: 1.19%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-13 05:58:21

End at: 2018-02-13 05:58:51

Below is generated by plot.py at 2018-02-13 10:53:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 505.94 Mbit/s

95th percentile per-packet one-way delay: 169.050 ms

Loss rate: 3.16%

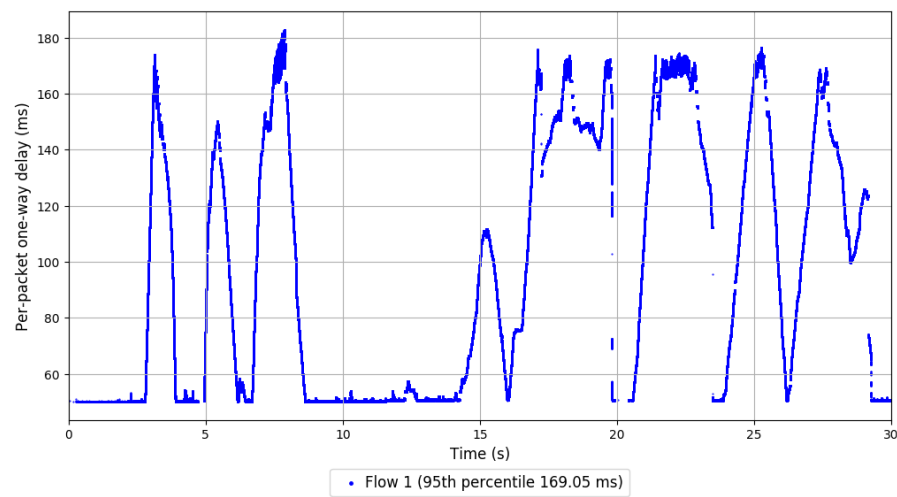
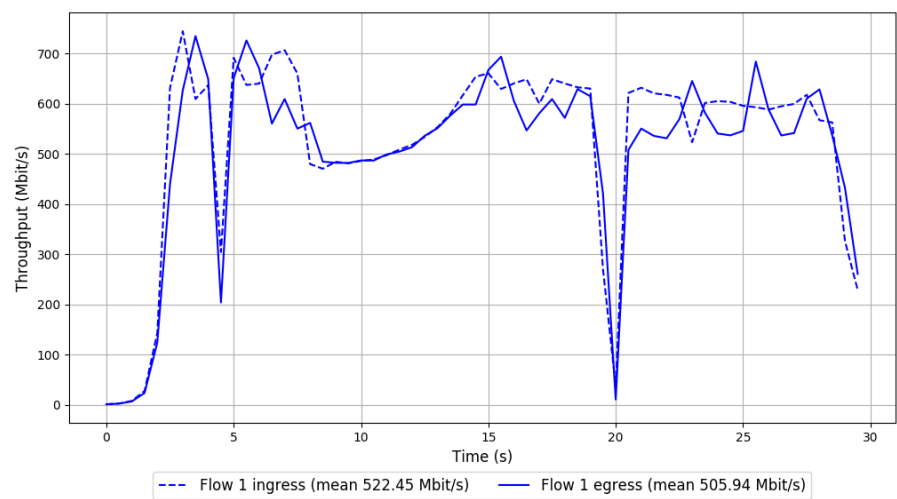
-- Flow 1:

Average throughput: 505.94 Mbit/s

95th percentile per-packet one-way delay: 169.050 ms

Loss rate: 3.16%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-13 06:13:00

End at: 2018-02-13 06:13:30

Below is generated by plot.py at 2018-02-13 10:53:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 479.01 Mbit/s

95th percentile per-packet one-way delay: 169.726 ms

Loss rate: 2.24%

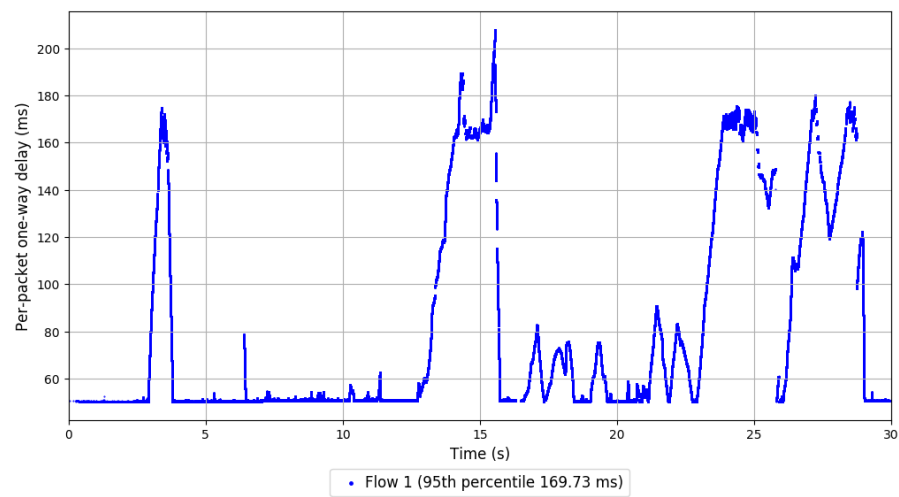
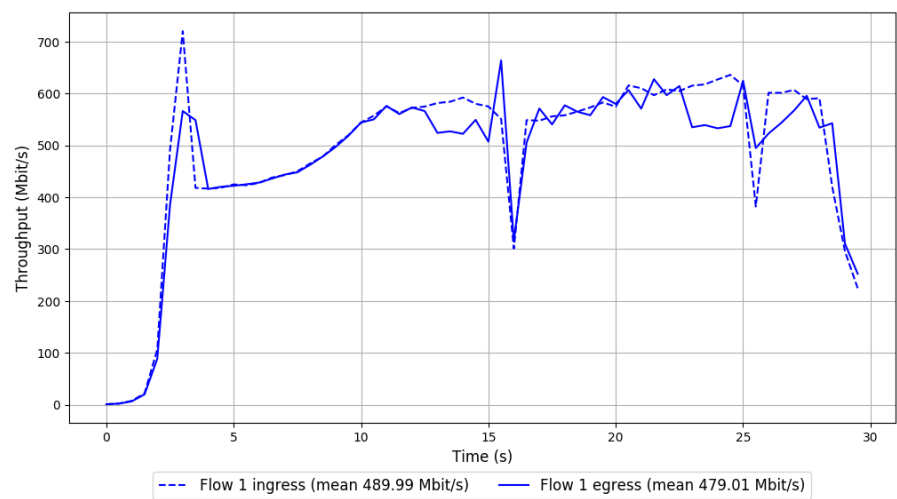
-- Flow 1:

Average throughput: 479.01 Mbit/s

95th percentile per-packet one-way delay: 169.726 ms

Loss rate: 2.24%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-13 06:27:39

End at: 2018-02-13 06:28:09

Below is generated by plot.py at 2018-02-13 10:53:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 439.39 Mbit/s

95th percentile per-packet one-way delay: 179.729 ms

Loss rate: 4.60%

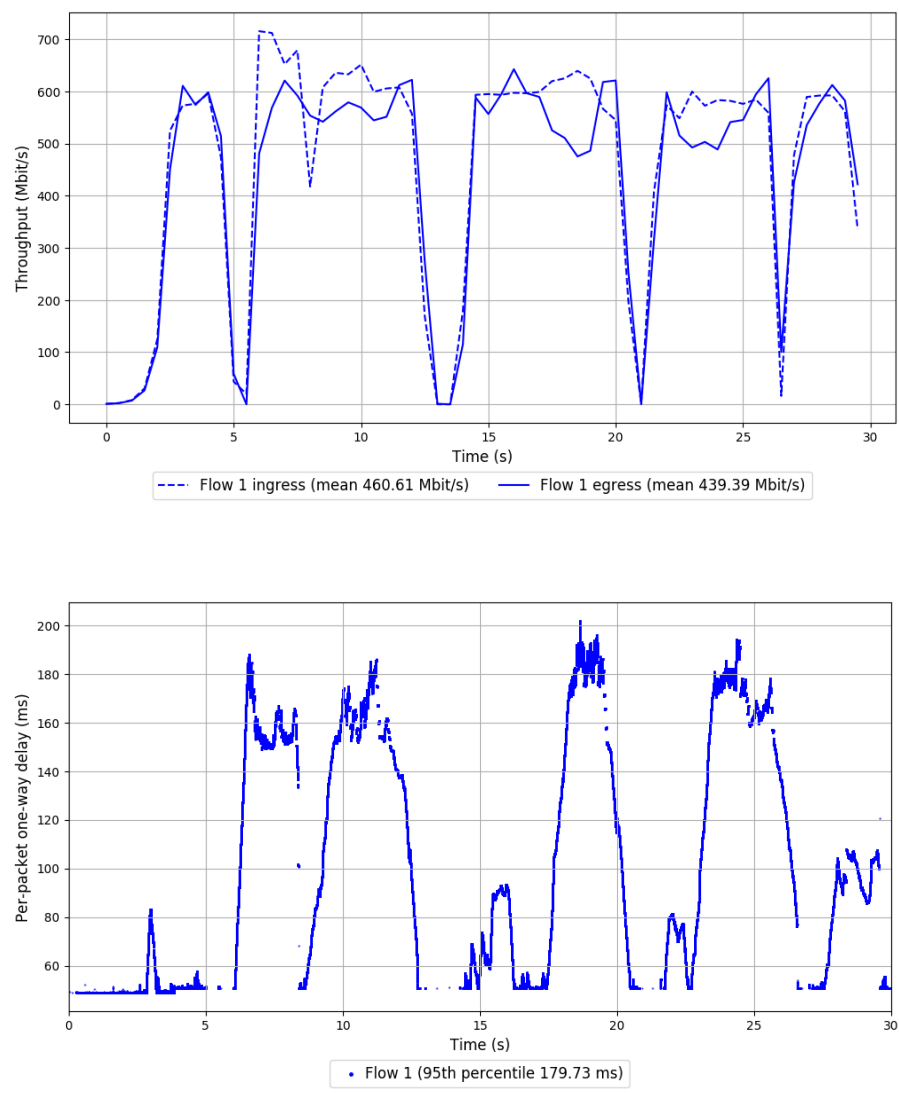
-- Flow 1:

Average throughput: 439.39 Mbit/s

95th percentile per-packet one-way delay: 179.729 ms

Loss rate: 4.60%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-13 06:42:07

End at: 2018-02-13 06:42:37

Below is generated by plot.py at 2018-02-13 10:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 407.50 Mbit/s

95th percentile per-packet one-way delay: 173.714 ms

Loss rate: 3.95%

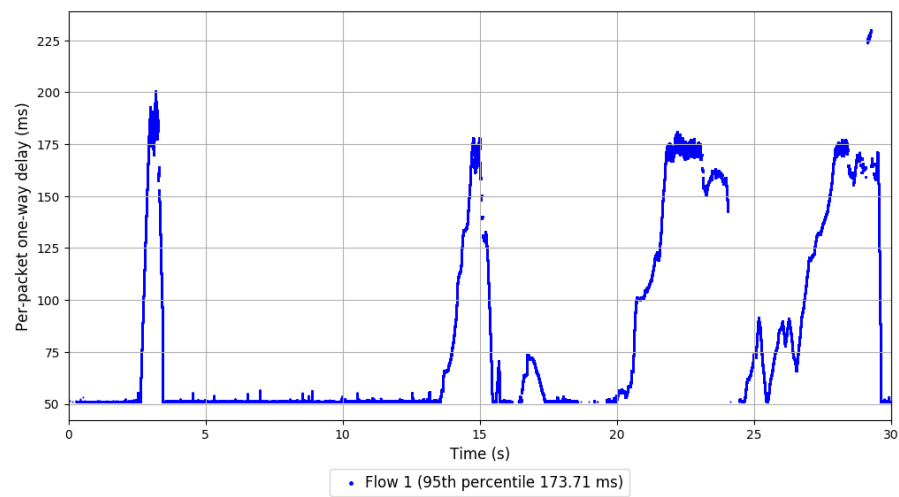
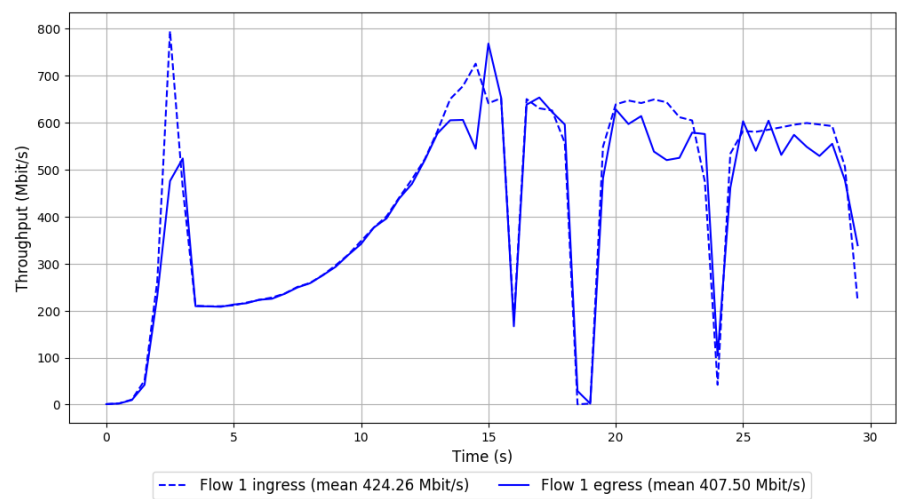
-- Flow 1:

Average throughput: 407.50 Mbit/s

95th percentile per-packet one-way delay: 173.714 ms

Loss rate: 3.95%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-13 06:56:38

End at: 2018-02-13 06:57:08

Below is generated by plot.py at 2018-02-13 10:56:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 402.27 Mbit/s

95th percentile per-packet one-way delay: 174.207 ms

Loss rate: 3.31%

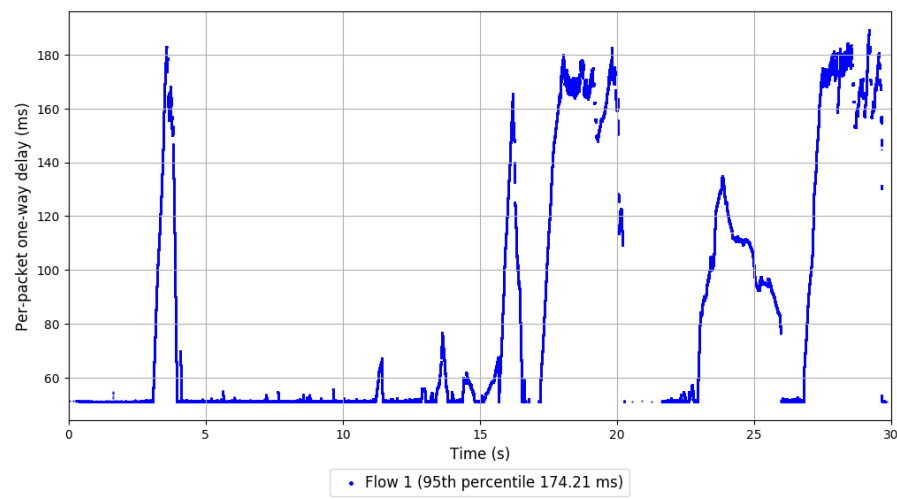
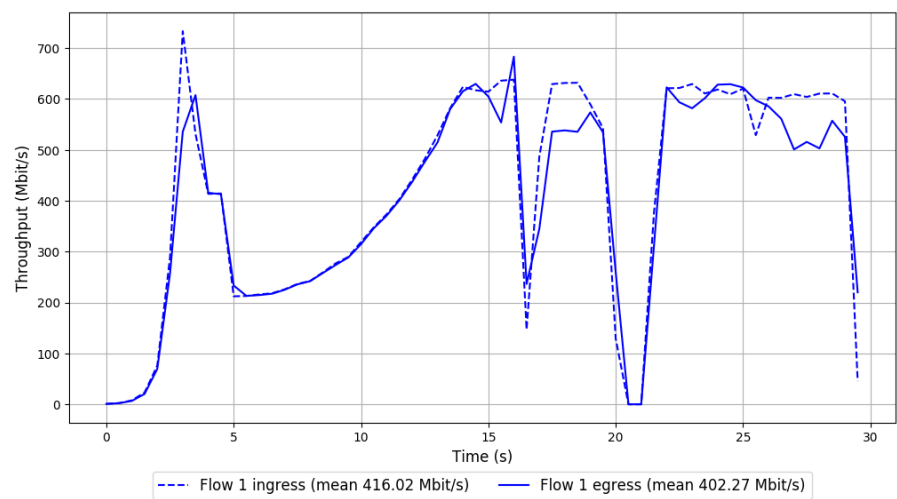
-- Flow 1:

Average throughput: 402.27 Mbit/s

95th percentile per-packet one-way delay: 174.207 ms

Loss rate: 3.31%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-13 07:11:03

End at: 2018-02-13 07:11:33

Below is generated by plot.py at 2018-02-13 10:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 456.99 Mbit/s

95th percentile per-packet one-way delay: 174.905 ms

Loss rate: 4.82%

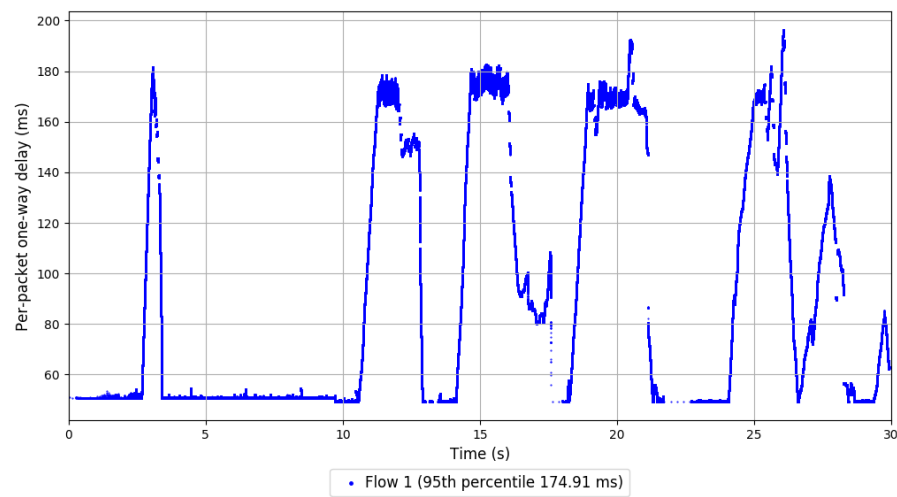
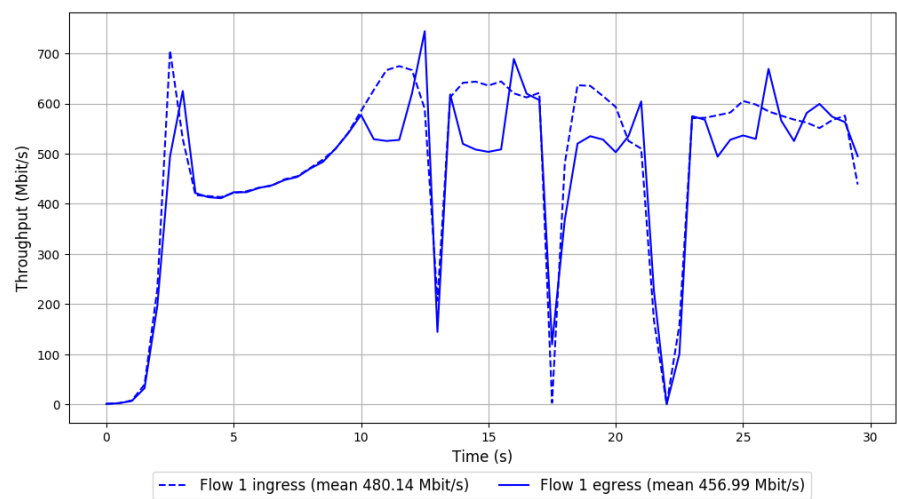
-- Flow 1:

Average throughput: 456.99 Mbit/s

95th percentile per-packet one-way delay: 174.905 ms

Loss rate: 4.82%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-13 07:25:27

End at: 2018-02-13 07:25:57

Below is generated by plot.py at 2018-02-13 10:58:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 454.68 Mbit/s

95th percentile per-packet one-way delay: 176.720 ms

Loss rate: 8.44%

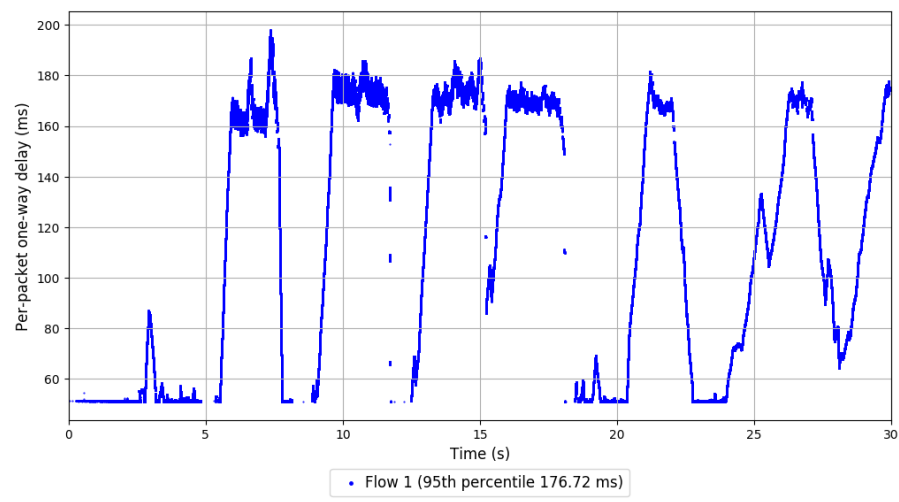
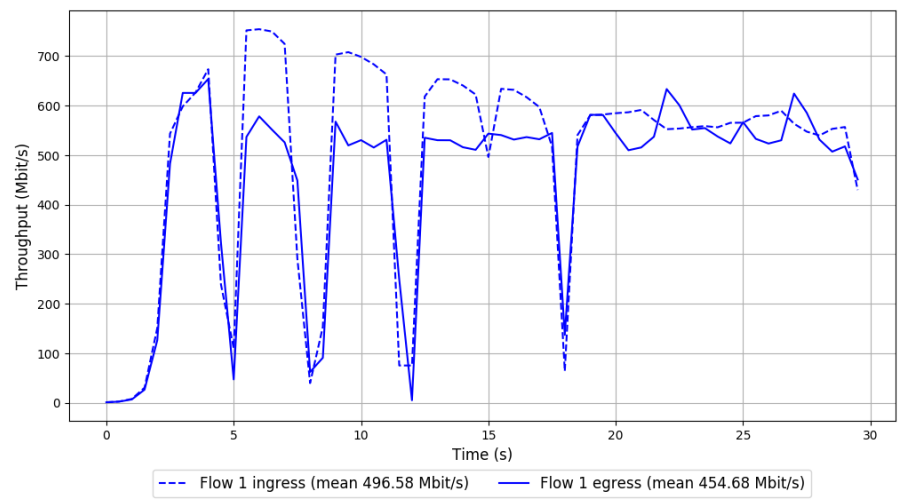
-- Flow 1:

Average throughput: 454.68 Mbit/s

95th percentile per-packet one-way delay: 176.720 ms

Loss rate: 8.44%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-13 07:39:55

End at: 2018-02-13 07:40:25

Below is generated by plot.py at 2018-02-13 11:00:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 454.15 Mbit/s

95th percentile per-packet one-way delay: 176.325 ms

Loss rate: 2.75%

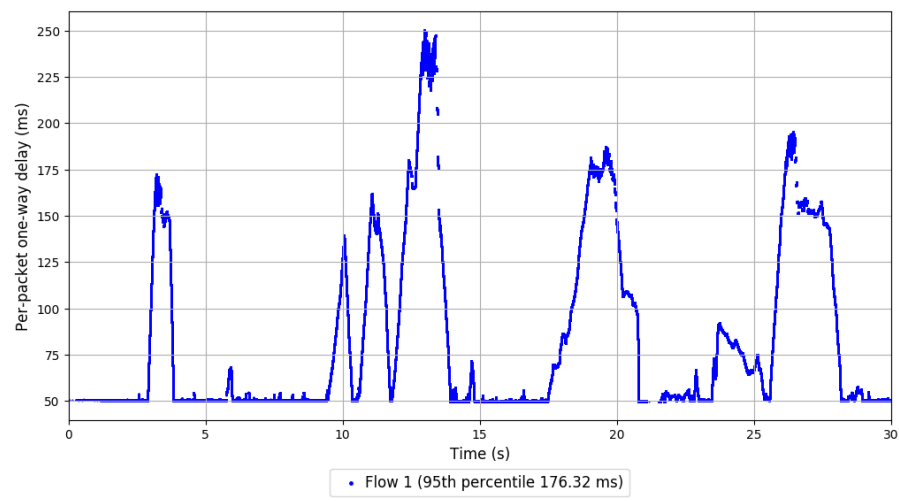
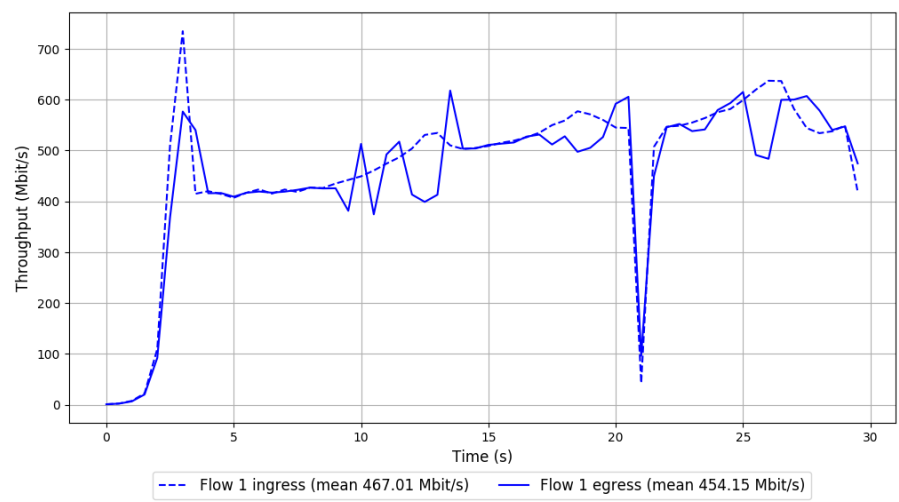
-- Flow 1:

Average throughput: 454.15 Mbit/s

95th percentile per-packet one-way delay: 176.325 ms

Loss rate: 2.75%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-13 07:54:36

End at: 2018-02-13 07:55:06

Below is generated by plot.py at 2018-02-13 11:00:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 433.92 Mbit/s

95th percentile per-packet one-way delay: 184.215 ms

Loss rate: 7.30%

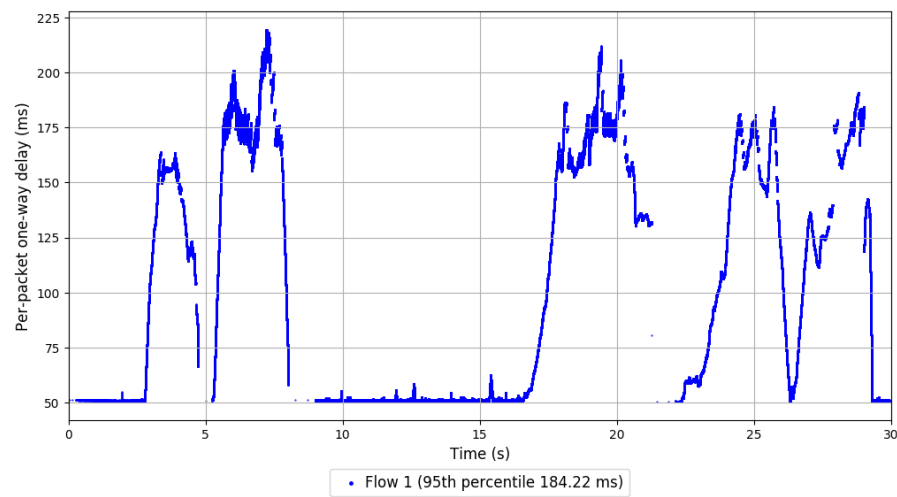
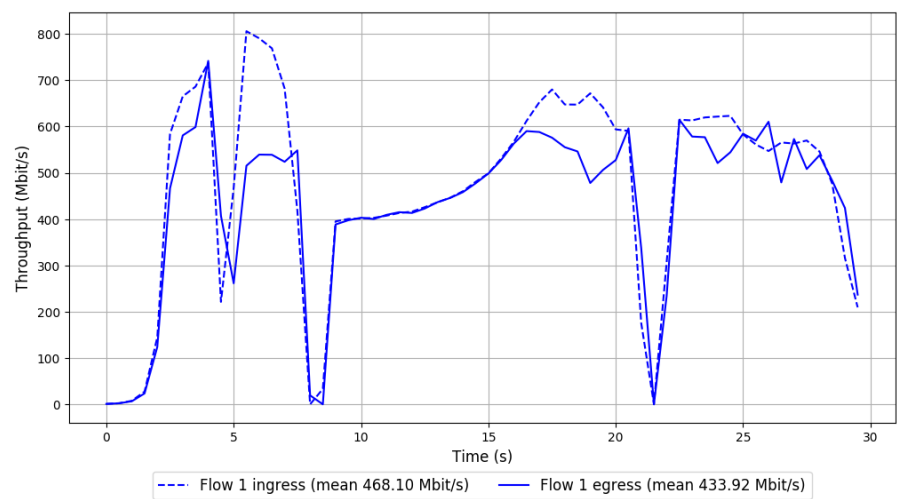
-- Flow 1:

Average throughput: 433.92 Mbit/s

95th percentile per-packet one-way delay: 184.215 ms

Loss rate: 7.30%

Run 10: Report of Vivace-loss — Data Link

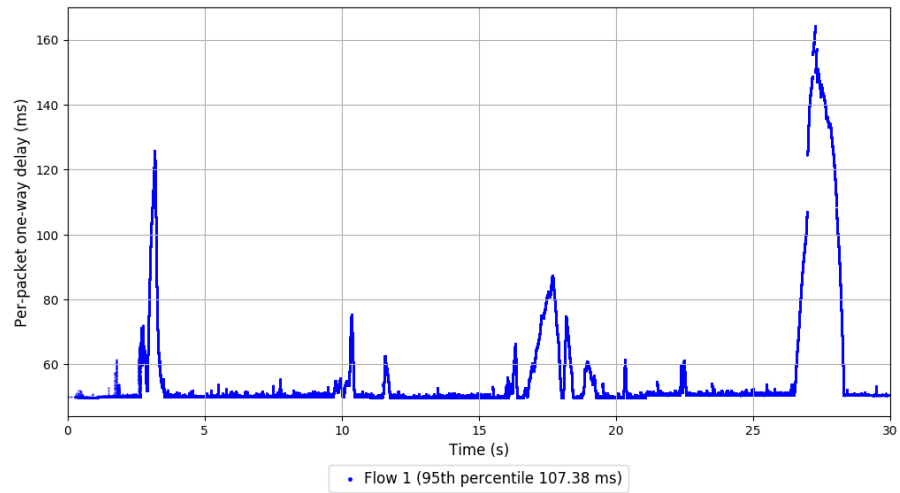
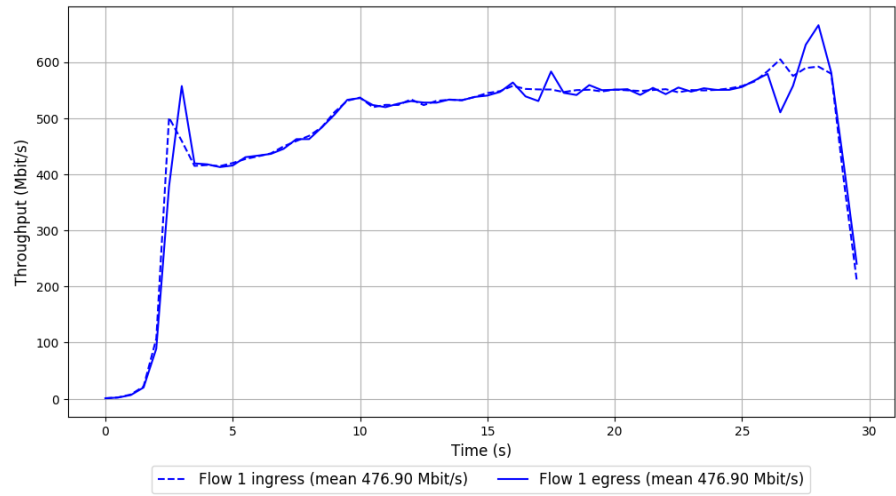


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-13 05:47:16
End at: 2018-02-13 05:47:46

# Below is generated by plot.py at 2018-02-13 11:01:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 476.90 Mbit/s
95th percentile per-packet one-way delay: 107.383 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 476.90 Mbit/s
95th percentile per-packet one-way delay: 107.383 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-13 06:02:17

End at: 2018-02-13 06:02:47

Below is generated by plot.py at 2018-02-13 11:01:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 426.66 Mbit/s

95th percentile per-packet one-way delay: 64.811 ms

Loss rate: 0.00%

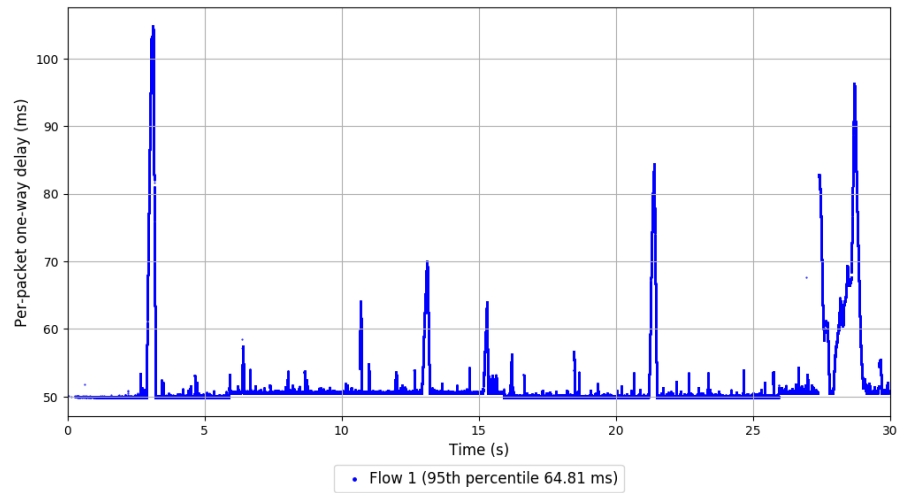
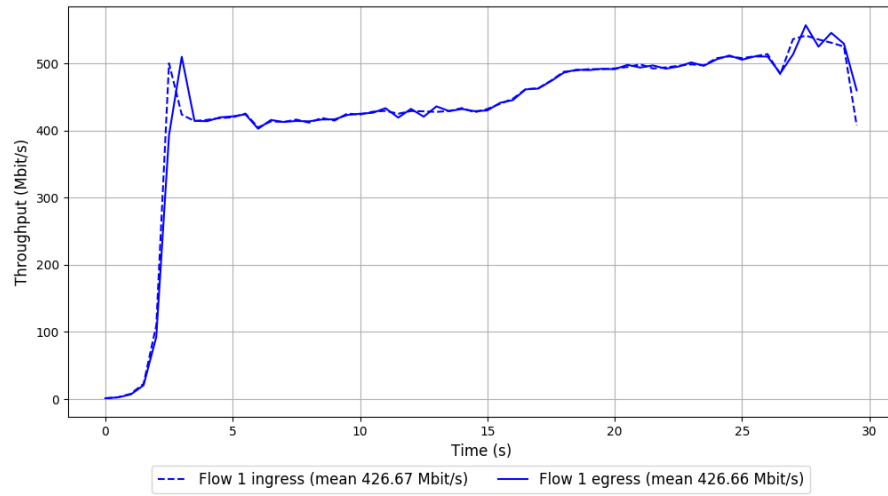
-- Flow 1:

Average throughput: 426.66 Mbit/s

95th percentile per-packet one-way delay: 64.811 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-13 06:16:55

End at: 2018-02-13 06:17:25

Below is generated by plot.py at 2018-02-13 11:03:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 445.80 Mbit/s

95th percentile per-packet one-way delay: 55.077 ms

Loss rate: 0.00%

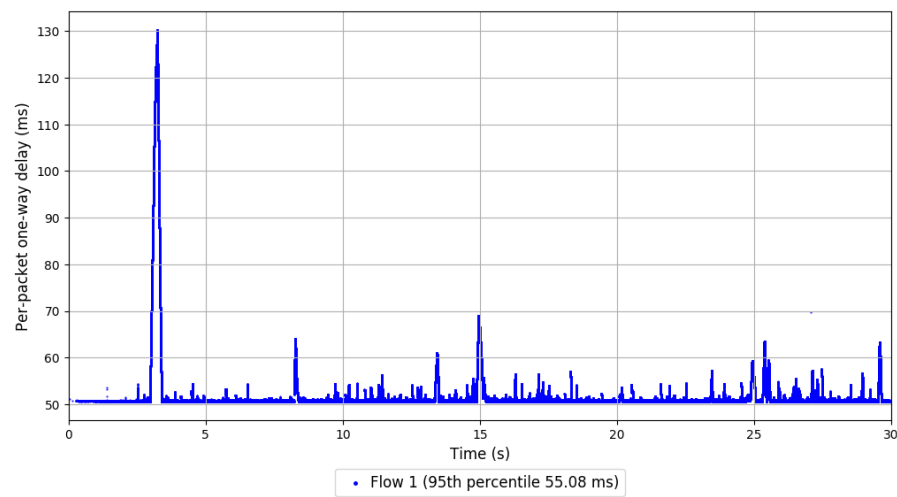
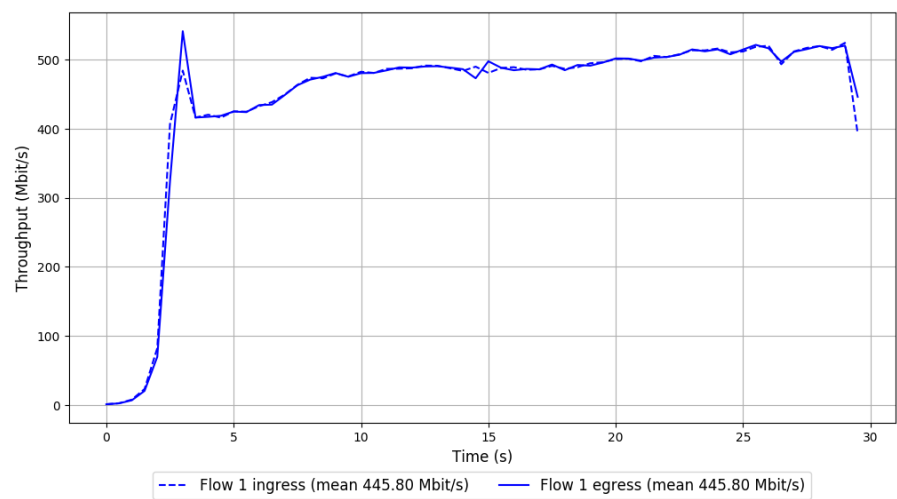
-- Flow 1:

Average throughput: 445.80 Mbit/s

95th percentile per-packet one-way delay: 55.077 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-13 06:31:30

End at: 2018-02-13 06:32:00

Below is generated by plot.py at 2018-02-13 11:03:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 373.33 Mbit/s

95th percentile per-packet one-way delay: 122.101 ms

Loss rate: 0.05%

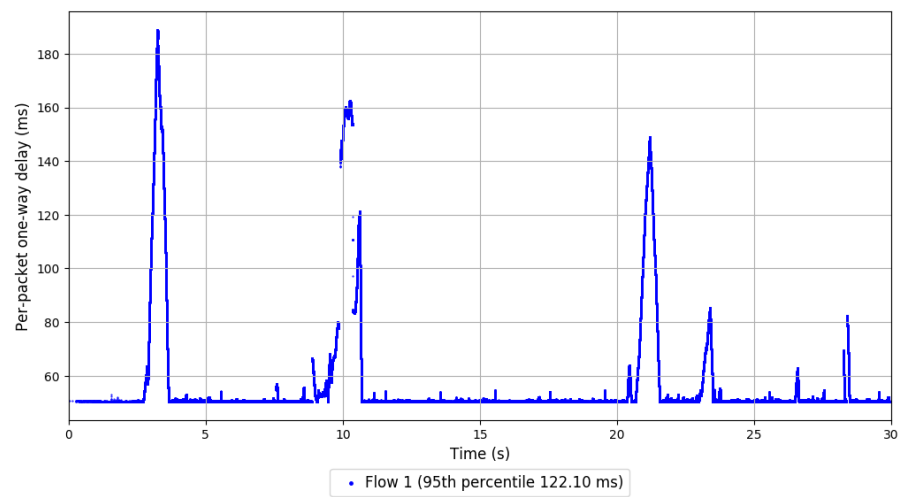
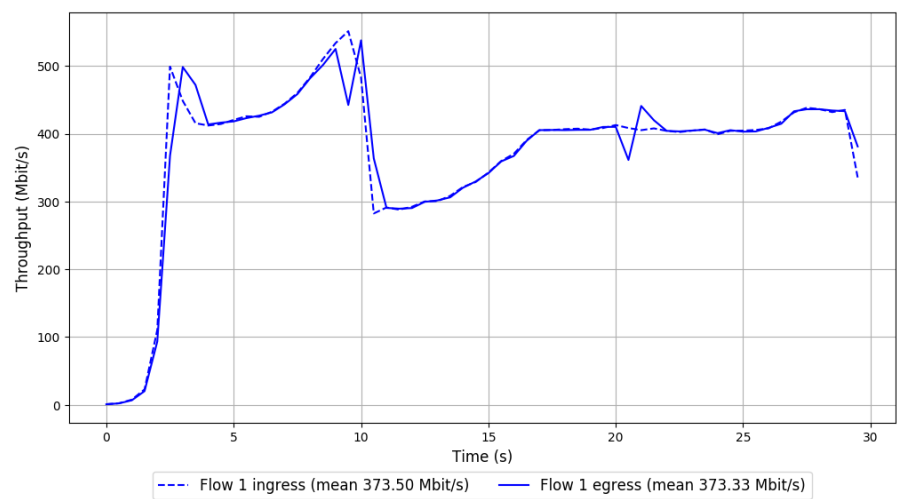
-- Flow 1:

Average throughput: 373.33 Mbit/s

95th percentile per-packet one-way delay: 122.101 ms

Loss rate: 0.05%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-13 06:45:55

End at: 2018-02-13 06:46:25

Below is generated by plot.py at 2018-02-13 11:04:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 414.02 Mbit/s

95th percentile per-packet one-way delay: 72.780 ms

Loss rate: 0.06%

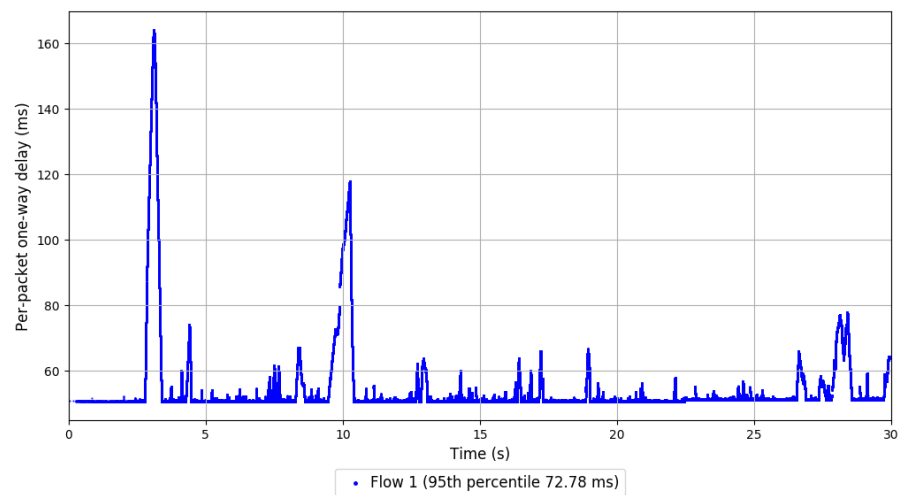
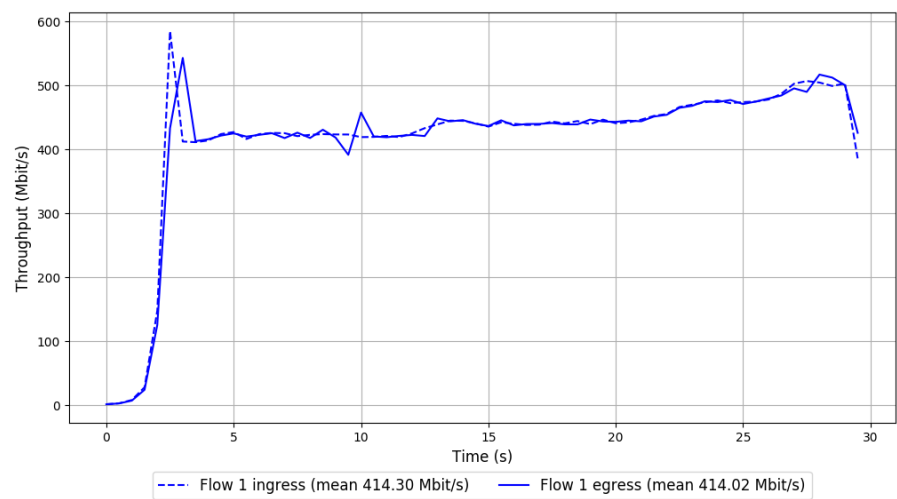
-- Flow 1:

Average throughput: 414.02 Mbit/s

95th percentile per-packet one-way delay: 72.780 ms

Loss rate: 0.06%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-13 07:00:28

End at: 2018-02-13 07:00:58

Below is generated by plot.py at 2018-02-13 11:04:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 365.50 Mbit/s

95th percentile per-packet one-way delay: 123.624 ms

Loss rate: 0.23%

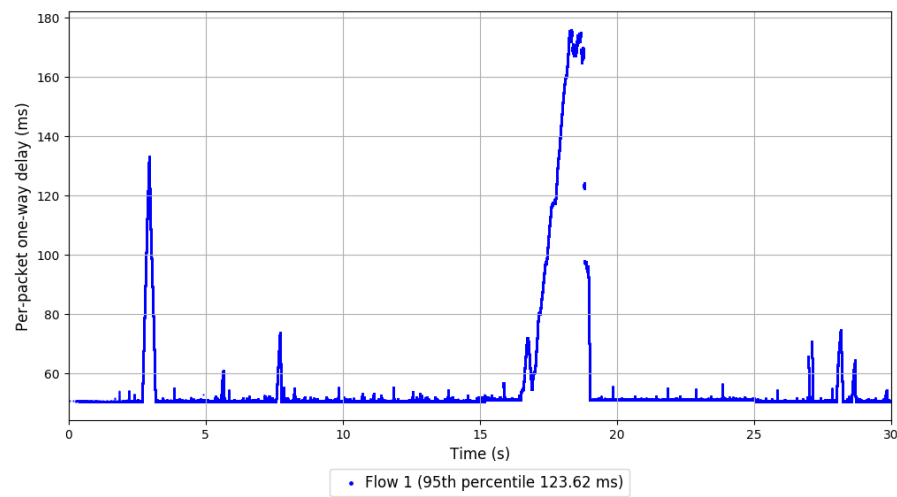
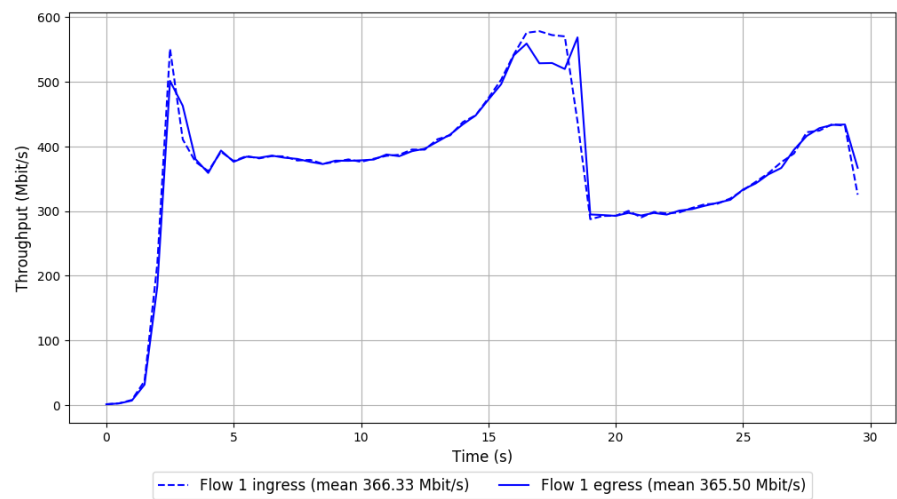
-- Flow 1:

Average throughput: 365.50 Mbit/s

95th percentile per-packet one-way delay: 123.624 ms

Loss rate: 0.23%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-13 07:14:49

End at: 2018-02-13 07:15:19

Below is generated by plot.py at 2018-02-13 11:05:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 433.76 Mbit/s

95th percentile per-packet one-way delay: 69.476 ms

Loss rate: 0.01%

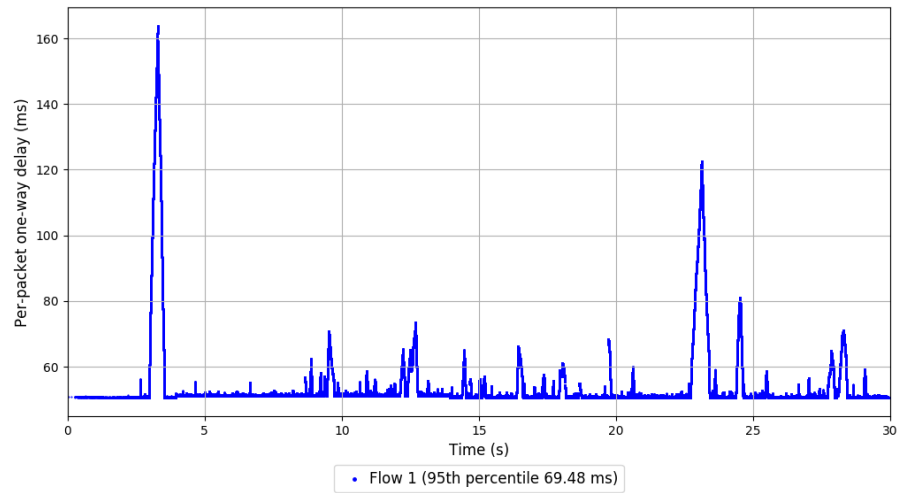
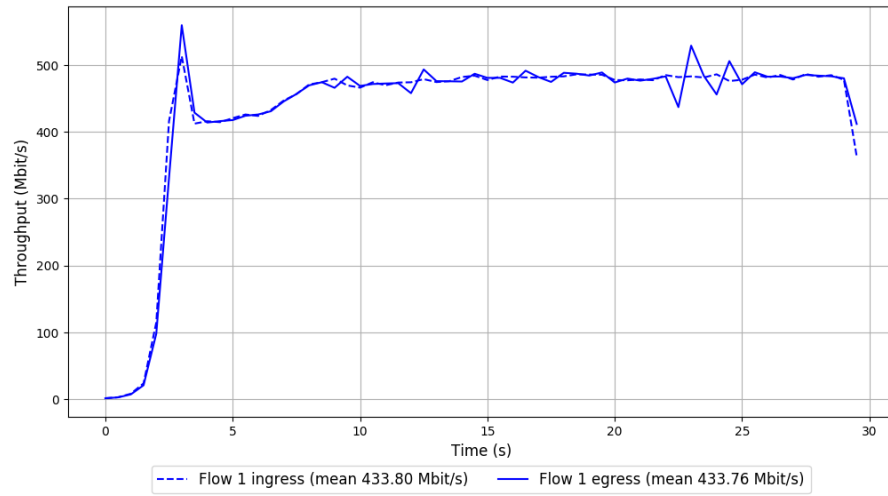
-- Flow 1:

Average throughput: 433.76 Mbit/s

95th percentile per-packet one-way delay: 69.476 ms

Loss rate: 0.01%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-13 07:29:17

End at: 2018-02-13 07:29:47

Below is generated by plot.py at 2018-02-13 11:05:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 411.94 Mbit/s

95th percentile per-packet one-way delay: 163.159 ms

Loss rate: 0.46%

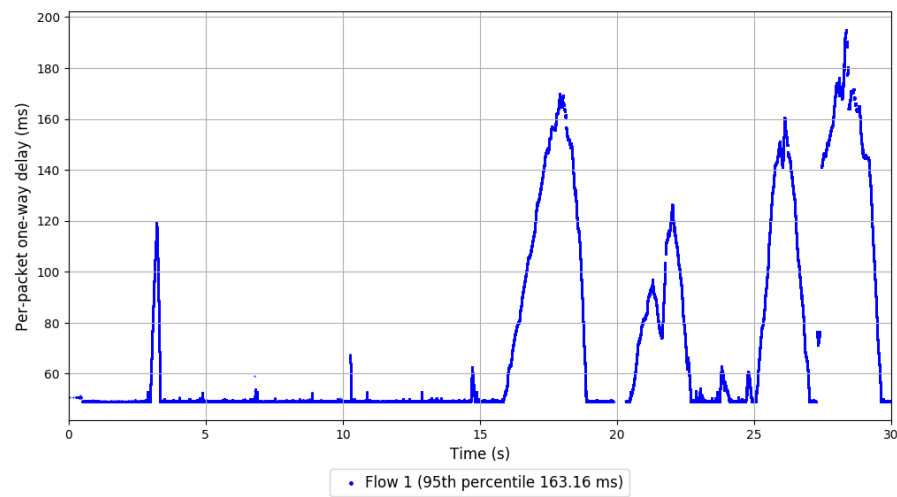
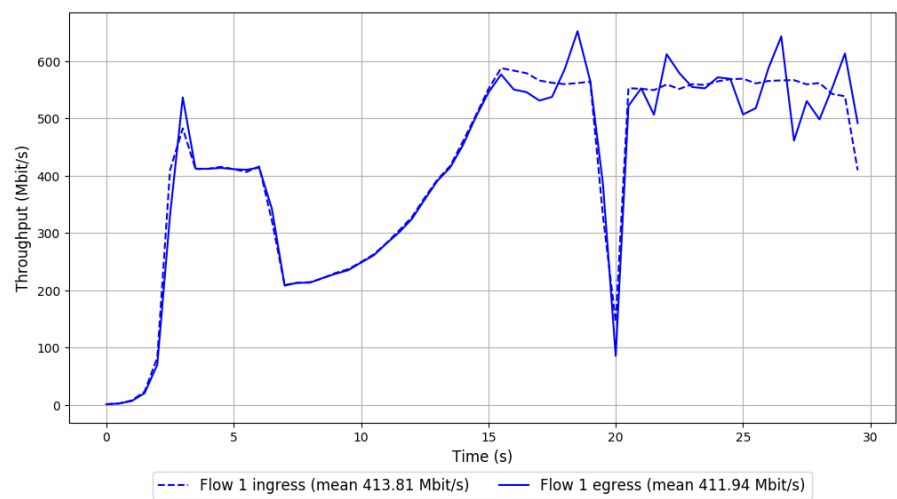
-- Flow 1:

Average throughput: 411.94 Mbit/s

95th percentile per-packet one-way delay: 163.159 ms

Loss rate: 0.46%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-13 07:43:51

End at: 2018-02-13 07:44:21

Below is generated by plot.py at 2018-02-13 11:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 432.72 Mbit/s

95th percentile per-packet one-way delay: 92.098 ms

Loss rate: 0.00%

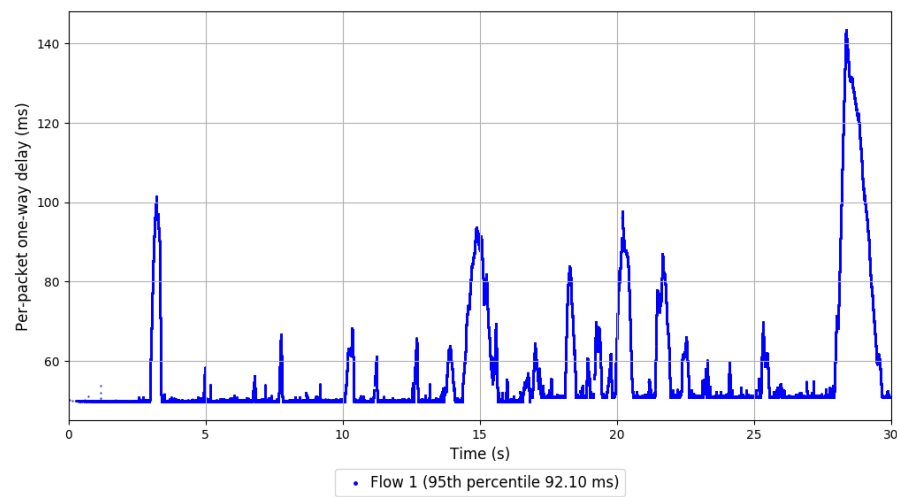
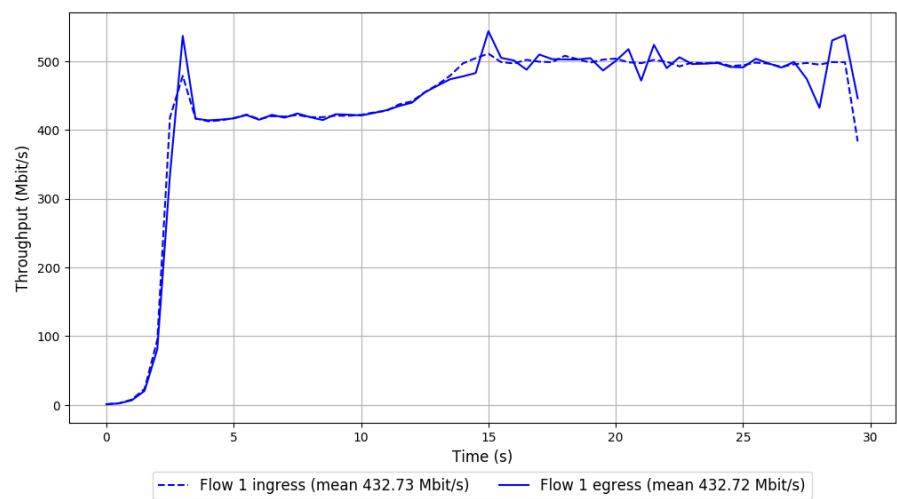
-- Flow 1:

Average throughput: 432.72 Mbit/s

95th percentile per-packet one-way delay: 92.098 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-13 07:58:22

End at: 2018-02-13 07:58:52

Below is generated by plot.py at 2018-02-13 11:05:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 448.20 Mbit/s

95th percentile per-packet one-way delay: 60.886 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 448.20 Mbit/s

95th percentile per-packet one-way delay: 60.886 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

